217/782-2113

"REVISED"

TITLE V - CLEAN AIR ACT PERMIT PROGRAM (CAAPP) PERMIT and

TITLE I PERMIT¹

PERMITTEE

Dixon/Lee Energy Partners, LLC Attn: Dominic Antignano 1420 Church Street, Unit D Bohemia, New York 11716

Application No.: 00070051 I.D. No.: 103020ACJ

Applicant's Designation: Date Received: July 20, 2000 Operation of: Municipal Solid Waste Landfill Gas Combustion Processes

Date Issued: December 1, 2003 Expiration Date²: December 1, 2008

Source Location: 1279 North Bataan Road, Dixon, Lee County

Responsible Official: Dominic Antignano, Manager or Regulatory Compliance

This permit is hereby granted to the above-designated Permittee to operate a municipal solid waste landfill gas combustion processes, pursuant to the above referenced permit application. This permit is subject to the conditions contained herein.

Revision Date Received: February 24, 2004 Revision Date Issued: January 20, 2005

Purpose of Revision: Significant Modification

This significant modification includes changes to the following:

Table of Contents	Corrected designation for Attachment 10.1 - Attachment 1 to read "Summary of Emission Units" instead of "Emissions of Particulate Matter from New Process Emission Units"
Section 1.4	Corrected and clarified the source description.
Section 4.0	Deleted Engine/Generator 5 from the table since the emission unit has not been installed yet.
Section 5.5.1	Corrected typographic errors
Section 7.1.1	Corrected and clarified the electrical generation facility description. Added the description of the landfill gas pre-treatment system.
Section 7.1.2	Deleted Engine/Generator 5 from the table since the emission unit has not been installed yet.
Section 7.1.3(c)	Added the landfill gas pre-treatment system and identified it as being approved pursuant to 40 CFR 60.752(b)(2)(iii)(C).
Section 7.1.3(d)	Corrected typographic errors and added wording stating

that the source is exempt from the control system monitoring and recordkeeping provisions of 40 CFR Part 60, Subpart WWW (i.e., 40 CFR 60.756(b) and 60.758(b) and

(c)) pursuant to Condition 7.1.3(c).

Section 7.1.5(a)(iii)	Revised the condition to clarify that compliance with the control requirements in 40 CFR 60.752(b)(2)(iii) is now based upon the USEPA approved treatment system and compliance with 40 CFR 60.752(b)(2)(iii)(C) (See Condition 7.1.3(c)).
Section 7.1.7(a)	Revised the condition in order to indicate that the source is not subject to the performance test requirements in 40 CFR 60.752(b)(2)(iii)(B) because the landfill gas pre-treatment qualifies has a treatment system for purposes of 40 CFR 60.752(b)(2)(iii)(C) (See Condition 7.1.3(c)).
Section 7.1.8(a)	Removed NMOC testing requirement since such testing is not required to determine compliance with the provisions of the permit and/or regulations applicable to the source.
Section 7.1.7(c)	Corrected typographical errors
Section 7.1.7(d)	Removed the requirement for weekly fugitive dust observations since the source does not have any traffic areas and/or open material handling or storage activities.
Section 7.1.8(a)(iv) and (b)	Revised the condition to indicate that the source is exempt from the control system monitoring provision of 40 CFR Part 60, Subpart WWW (i.e., 40 CFR 60.756(b)) as per Condition 7.1.3(c).
Section 7.1.8(e)	Removed the requirement for weekly fugitive dust observations since the source is inherently in compliance with the requirements in Condition 5.2.2(a).
Condition 7.1.9(b)(vii)	Revised condition to indicate that the source is exempt from the control system recordkeeping provisions of 40 CFR Part 60, Subpart WWW (i.e., 40 CFR 60.758(b) and (c)).
Condition 7.1.9(b)(viii)	Revised the condition to indicate that recordkeeping requirements for the open flare are subject the general Illinois recordkeeping requirement (i.e., 35 IAC 201.281) as opposed to the 40 CFR 60.758(b)(4).
Condition 7.1.9(c)	Revised the condition to indicate that the source is exempt from the control system recordkeeping provisions of 40 CFR Part 60, Subpart WWW (i.e., 40 CFR 60.758(b) and (c)).

Page 3

Condition 7.1.9(d)

Revised the condition to indicate that the recordkeeping requirements for control system flow monitoring and bypas monitoring are subject the general Illinois recordkeeping requirement (i.e., 35 IAC 201.281) as opposed to the 40 CFR 60.758(c).

Condition 7.1.10(b)

Corrected typographic errors

Condition 7.1.12(a)(ii)

Corrected emission factors table

Attachment 1 - Summary of

Emission Units

Revised emission unit table to indicate "Commence Operation Dates" and deleted Engine/Generator 5 from the table since the emission unit has not been installed yet.

Attachment 6 - Scanned Copy Added Attachment 6 of the Letter to Gregory J. Graetz - Derenzo and Associates, Inc. from George Czerniak - USEPA, dated December 9, 2003

This document only contains those portions of the entire CAAPP permit that have been revised as a result of this permitting action. If a conflict exists between this document and previous versions of the CAAPP permit, this document supercedes those terms and conditions of the permit for which the conflict exists. The previous permit issued December 1, 2003 is incorporated herein by reference.

Please attach a copy of this amendment and the following revised pages to the front of the most recently issued entire permit.

If you have any questions concerning this permit, please contact Mike Davidson at 217/782-2113.

Donald E. Sutton, P.E. Manager, Permit Section Division of Air Pollution Control

DES:MED:psj

Illinois EPA, FOS, Region 2 cc:

- This permit may contain terms and conditions which address the applicability, and compliance if determined applicable, of Title I of the CAA and regulations promulgated thereunder, including 40 CFR 52.21 - federal PSD and 35 IAC Part 203 - Major Stationary Sources Construction and Modification. Any such terms and conditions are identified within this permit.
- Except as provided in Condition 8.7 of this permit.

TABLE OF CONTENTS

		PAGE
1.0	SOURCE IDENTIFICATION	6
	1.1 Source1.2 Owner/Parent Company1.3 Operator1.4 General Source Description	
2.0	LIST OF ABBREVIATIONS/ACRONYMS USED IN THIS PERMIT	7
3.0	INSIGNIFICANT ACTIVITIES	9
	3.1 Identification of Insignificant Activities3.2 Compliance with Applicable Requirements3.3 Addition of Insignificant Activities	
4.0	SIGNIFICANT EMISSION UNITS AT THIS SOURCE	11
5.0	OVERALL SOURCE CONDITIONS	12
	 5.1 Source Description 5.2 Applicable Regulations 5.3 Non-Applicability of Regulations of Concern 5.4 Source-Wide Operational and Production Limits Practices 5.5 Source-Wide Emission Limitations 5.6 General Recordkeeping Requirements 5.7 General Reporting Requirements 5.8 General Operational Flexibility/Anticipated Operations 5.9 General Compliance Procedures 	
6.0	NOT APPLICABLE TO THIS PERMIT	19
7.0	UNIT SPECIFIC CONDITIONS	20
	7.1 Electrical Generation Facility	
8.0	GENERAL PERMIT CONDITIONS	48
	8.1 Permit Shield 8.2 Applicability of Title IV Requirements 8.3 Emissions Trading Programs 8.4 Operational Flexibility/Anticipated Operating 8.5 Testing Procedures 8.6 Reporting Requirements 8.7 Obligation to Comply with Title I Requirements	
9.0	STANDARD PERMIT CONDITIONS	53
	9.1 Effect of Permit	

			PAGE
	9.7 9.8 9.9 9.10 9.11 9.12 9.13	Recordkeeping	
10.0	ATTACE	HMENTS	
		Attachment 1 - Summary of Emission Units Attachment 2 - Example Certification by a Responsible Official	1-1 2-1
		Attachment 3 - Guidance on Revising This Permit Attachment 4 - Form 199-CAAPP, Application For Construction Permit (For CAAPP Sources Only)	3-1 4-1
		Attachment 5 - Guidance on Renewing This Permit Attachment 6 - Scanned Copy of the Letter to Gregory J. Graetz - Derenzo and Associates, Inc. from George Czerniak - USEPA, dated December 9, 2003	5-1 6-1

1.0 SOURCE IDENTIFICATION

1.1 Source

Dixon/Lee Landfill 1279 North Bataan Road Dixon, Illinois 61021 815/288-7035

I.D. No.: 103020ACJ Standard Industrial Classification: 4911, Electric Services

1.2 Owner/Parent Company

Dixon/Lee Energy Partners, LLC 40 Tower Lane Avon, Connecticut 06001

1.3 Operator

Illinois Electrical Generation Partners, L.L.C. 1420 Church Street, Unit D Bohemia, New York 11716

Dominic Antignano, Manager or Regulatory Compliance 631/563-6336

1.4 General Source Description

The Dixon/Lee Energy Partners, LLC is located at 1279 North Bataan Road near Dixon, Illinois. The source utilizes landfill for the production of electricity. Additionally, the plant is also used to control landfill gas methane and NMOC emissions. The landfill gas is the only fuel used at the source. The gas is supplied by the adjacent closed Dixon/GROP #2 landfill (Phases II through V) which is owned by the City of Dixon BOA I.D. No. 103020ACD, and the Lee County Landfill which is owned and operated by Allied Waste, Inc. (See CAAPP Permit No. 99090089 - BOA I.D. No. 103806AAL).

Dixon/Lee Energy Partners, LLC, a separate corporate entity, has contracted with the City of Dixon and Allied Waste, Inc. to use the gas generated from the landfill in its landfill gas to energy facility.

It should be noted that the adjacent Dixon/GROP #1 landfill and Phase I of the Dixon/GROP #2 landfill (Owned by the City of Dixon BOA I.D. No. 103020ACD) located at 1279 North Bataan Road, Dixon do not have a landfill gas collection and control system at the time of issuance of this permit. (See Condition 5.1.4)

2.0 LIST OF ABBREVIATIONS/ACRONYMS USED IN THIS PERMIT

Act	Illinois Environmental Protection Act [415 ILCS 5/1 et seq.]
ACMA	Alternative Compliance Market Account
a.k.a.	also known as
AP-42	Compilation of Air Pollutant Emission Factors, Volume 1, Stationary Point and Other Sources (and Supplements A through F), USEPA, Office of Air Quality Planning and Standards, Research Triangle Park, NC 27711
ATU	Allotment Trading Unit
bhp	Brake Horsepower
BOA	Bureau of Air (Illinois EPA)
BOL	Bureau of Land (Illinois EPA)
Btu	British thermal unit
Btu/scf	British thermal unit per standard cubic feet
CAA	Clean Air Act [42 U.S.C. Section 7401 et seq.]
CAAPP	Clean Air Act Permit Program
CAM	Compliance Assurance Monitoring
CAS	Chemical Abstract Service
CEMS	Continuous Emission Monitoring System
CFR	Code of Federal Regulations
CO	Carbon Monoxide
CFR	Code of Federal Regulations
CMS	Continuous Monitoring System
dscf	dry standard cubic feet
ERMS	Emissions Reduction Market System
ft ³	Cubic Feet
gal	Gallon
g/bhp-hr	grams per braking horsepower hour
HAP	Hazardous Air Pollutant
hr	hour
IAC	Illinois Administrative Code
I.D. No.	Identification Number of Source, assigned by Illinois EPA
Illinois EPA	Illinois Environmental Protection Agency
°K	Degrees Kelvin
kPa	Kilopascals
kg	Kilograms
kW	Kilowatts
1	liters
lb	Pound
LFG	Landfill Gas
ILCS	Illinois Compiled Statutes
Mg	Megagrams
MW	Megawatts
MWe	Megawatts electricity
mmBtu	Million British Thermal Units
mmBtu/hr	Million British Thermal Units per hour
mmHg	Millimeters of Mercury
mmcf	Million cubic feet
mmscf	Million standard cubic feet
NMOC	Nonmethane Organic Compound

mo	Month		
NESHAP	National Emission Standards for Hazardous Air Pollutants		
NO _x	Nitrogen Oxides		
NSPS	New Source Performance Standards		
psia	pounds per square inch absolute		
PM	Particulate Matter		
PM ₁₀	Particulate matter with an aerodynamic diameter less than or equal to a nominal 10 microns as measured by applicable test or monitoring methods		
ppm	parts per million		
ppmv	parts per million volume		
PSD	Prevention of Significant Deterioration		
RMP	Risk Management Plan		
scf	standard cubic feet		
scfm	standard cubic feet per minute		
scm	standard cubic meters		
SIP	State Implementation Plan		
SSM	Startup, Shutdown, and Malfunction		
SO ₂	Sulfur Dioxide		
Т1	Title I - identifies Title I conditions that have been carried over from an existing permit		
T1N	Title I New - identifies Title I conditions that are being established in this permit		
T1R	Title I Revised - identifies Title I conditions that have been carried over from an existing permit and subsequently revised in this permit		
USEPA	United States Environmental Protection Agency		
VOL	Volatile Organic Liquid		
VOM	Volatile Organic Material		
yr	Year		

3.0 INSIGNIFICANT ACTIVITIES

3.1 Identification of Insignificant Activities

The following activities at the source constitute insignificant activities as specified in 35 IAC 201.210:

3.1.1 Activities determined by the Illinois EPA to be insignificant activities, pursuant to 35 IAC 201.210(a)(1) and 201.211, as follows:

250 Gallon Storage Tank for New Glycol Coolant 250 Gallon Storage Tank for Used Glycol Coolant

3.1.2 Activities that are insignificant activities based upon maximum emissions, pursuant to 35 IAC 201.210(a)(2) or (a)(3), as follows:

None

3.1.3 Activities that are insignificant activities based upon their type or character, pursuant to 35 IAC 201.210(a)(4) through (18), as follows:

Storage tanks of organic liquids with a capacity of less than 10,000 gallons and an annual throughput of less than 100,000 gallons per year, provided the storage tank is not used for the storage of gasoline or any material listed as a HAP pursuant to Section 112(b) of the CAA [35 IAC 201.210(a)(10)].

Storage tanks of any size containing virgin or rerefined distillate oil, hydrocarbon condensate from natural gas pipeline or storage systems, lubricating oil, or residual fuel oils [35 IAC 201.210(a)(11)].

Loading and unloading systems for railcars, tank trucks, or watercraft that handle only the following liquid materials, provided an organic solvent has not been mixed with such materials: soaps, detergents, surfactants, lubricating oils, waxes, glycerin, vegetable oils, greases, animal fats, sweetener, corn syrup, aqueous salt solutions, or aqueous caustic solutions [35 IAC 201.210(a)(18)].

- 3.1.4 Activities that are considered insignificant activities pursuant to 35 IAC 201.210(b).
- 3.2 Compliance with Applicable Requirements

Insignificant activities are subject to applicable requirements notwithstanding status as insignificant activities. In particular, in addition to regulations of general applicability, such as 35 IAC 212.301 and 212.123 (Condition 5.2.2), the

Permittee shall comply with the following requirements, as applicable:

- 3.2.1 For each cold cleaning degreaser, the Permittee shall comply with the applicable equipment and operating requirements of 35 IAC 215.182, 218.182, or 219.182.
- 3.2.2 For each particulate matter process emission unit, the Permittee shall comply with the applicable particulate matter emission limit of 35 IAC 212.321 or 212.322. For example, the particulate matter emissions from a process emission unit shall not exceed 0.55 pounds per hour if the emission unit's process weight rate is 100 pounds per hour or less, pursuant to 35 IAC 266.110.
- 3.2.3 For each organic material emission unit that uses organic material, e.g., a mixer or printing line, the Permittee shall comply with the applicable VOM emission limit of 35 IAC 215.301, 218.301, or 219.301, which requires that organic material emissions not exceed 8.0 pounds per hour or do not qualify as photochemically reactive material as defined in 35 IAC 211.4690.
- 3.3 Addition of Insignificant Activities
 - 3.3.1 The Permittee is not required to notify the Illinois EPA of additional insignificant activities present at the source of a type that is identified in Condition 3.1, until the renewal application for this permit is submitted, pursuant to 35 IAC 201.212(a).
 - 3.3.2 The Permittee must notify the Illinois EPA of any proposed addition of a new insignificant activity of a type addressed by 35 IAC 201.210(a) and 201.211 other than those identified in Condition 3.1, pursuant to Section 39.5(12)(b) of the Act.
 - 3.3.3 The Permittee is not required to notify the Illinois EPA of additional insignificant activities present at the source of a type identified in 35 IAC 201.210(b).

4.0 SIGNIFICANT EMISSION UNITS AT THIS SOURCE

Emission		Emission Control
Unit	Description	Equipment
Engine/Generator 1	Jenbacher	None
	Landfill Gas Fired Gensets	
	$(Model JGC 320 GS-L.L.)^{1}$	
Engine/Generator 2	Jenbacher	None
	Landfill Gas Fired Gensets	
	$(Model JGC 320 GS-L.L.)^{1}$	
Engine/Generator 3	Jenbacher	None
	Landfill Gas Fired Gensets	
	(Model JGC 320 GS-L.L.) 1	
Engine/Generator 4	Jenbacher	None
	Landfill Gas Fired Gensets	
	(Model JGC 320 GS-L.L.) 1	
	Candlestick Flare ¹	None

(Also See Attachment 10.1)

Landfill gas utilized in the above emission units is generated by Phases II through V of the Dixon/GROP #2 landfill (Owned by the City of Dixon BOA I.D. No. 103020ACD) and the Lee County Landfill (See CAAPP Permit No. 99090089 - BOA I.D. No. 103806AAL).

5.0 OVERALL SOURCE CONDITIONS

5.1 Source Description

- 5.1.1 This permit is issued based on the source requiring a CAAPP permit as a major source of carbon monoxide emissions.
- 5.1.2 This permit is issued based on the source requiring a CAAPP permit because the source is subject to a standard, limitation, or other requirement under Section 111 (NSPS) or Section 112 (HAPs) of the CAA for which USEPA requires a CAAPP permit, or because the source is in a source category designated by the USEPA, pursuant to 40 CFR 70.3(a)(2), (3), and (5) (40 CFR 70.3 Applicability) [Section 39.5(2)(a)(ii) and (iv) of the Act].
- 5.1.3 This permit is issued based on the source not being a major source of HAPs.
- 5.1.4 For purposes of the CAAPP, Dixon/Lee Energy Partners, LLC (BOA I.D. No 103020ACJ), located at 1279 North Bataan Road, Dixon is considered a single source with the adjacent Lee County Landfill (Owned by Allied Waste, Inc. CAAPP Permit Application No. 99090089 BOA I.D. No. 103806AAL) and the Dixon/GROP #1 and #2 landfills (Owned by the City of Dixon BOA I.D. No. 103020ACD) located at 1279 North Bataan Road, Dixon. The source has elected to obtain separate CAAPP permits for these locations.

It should be noted that Dixon/Lee Energy Partners, LLC is a separate corporate entity, which has contracted with the City of Dixon and Lee County Landfill, Inc. to use the gas generated from the landfill in its landfills gas to energy source.

5.2 Applicable Regulations

- 5.2.1 Specific emission units at this source are subject to particular regulations as set forth in Section 7 (Unit-Specific Conditions) of this permit.
- 5.2.2 In addition, emission units at this source are subject to the following regulations of general applicability:
 - a. No person shall cause or allow the emission of fugitive particulate matter from any process, including any material handling or storage activity, that is visible by an observer looking generally overhead at a point beyond the property line of the source unless the wind speed is greater than 40.2 kilometers per hour (25 miles per hour), pursuant to 35 IAC 212.301 and 212.314.

Compliance with this requirement is considered to be assured by the inherent nature of operations at this source, as demonstrated by historical operation.

- b. No person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to the requirements of 35 IAC 212.122, pursuant to 35 IAC 212.123(a), except as allowed by 35 IAC 212.123(b) and 212.124.
- c. No person shall cause or allow the loading of any organic material into any stationary tank having a storage capacity of greater than 946 1 (250 gal), unless such tank is equipped with a permanent submerged loading pipe, submerged fill or an equivalent device approved by the Illinois EPA.

 [35 IAC 215.122(b]

If no odor nuisance exists the limitations of the above shall only apply to the loading of volatile organic liquid with a vapor pressure of 17.24 kPa (2.5 psia) or greater of 294.3°K (70°F) . [35 IAC 215.122(c)]

Note: At the time of issuance of this permit, no volatile organic liquid was loaded at the source.

"Submerged loading pipe", for purposes of the above is defined in 35 IAC 211.6470(a).

5.2.3 Ozone Depleting Substances

The Permittee shall comply with the standards for recycling and emissions reduction of ozone depleting substances pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioners in Subpart B of 40 CFR Part 82:

- a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.
- b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.
- c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

5.2.4 Risk Management Plan

Should this stationary source, as defined in 40 CFR Section 68.3, become subject to the Accidental Release Prevention regulations in 40 CFR Part 68, then the owner or operator shall submit [40 CFR 68.215(a)(2)(i) and (ii)]:

- a. A compliance schedule for meeting the requirements of 40 CFR Part 68 by the date provided in 40 CFR 68.10(a); or
- b. A certification statement that the source is in compliance with all requirements of 40 CFR Part 68, including the registration and submission of the Risk Management Plan (RMP), as part of the annual compliance certification required by 40 CFR Part 70 or 71.

5.2.5 Future Applicable Regulations

- a. Should this stationary source become subject to a regulation under 40 CFR Parts 60, 61, or 63, or 35 IAC after the date issued of this permit, then the owner or operator shall, in accordance with the applicable regulation(s), comply with the applicable requirements by the date(s) specified and shall certify compliance with the applicable requirements of such regulation(s) as part of the annual compliance certification, as required by 40 CFR Part 70 or 71.
- b. No later than upon the submittal for renewal of this permit, the owner or operator shall submit, as part of an application, the necessary information to address either the non-applicability of, or demonstrate compliance with all applicable requirements of any potentially applicable regulation which was promulgated after the date issued of this permit.

5.2.6 Episode Action Plan

a. If the source is required to have an episode action plan pursuant to 35 IAC 244.142, the Permittee shall maintain at the source and have on file with the Illinois EPA a written episode action plan (plan) for reducing the levels of emissions during yellow alerts, red alerts, and emergencies, consistent with safe operating procedures. The plan shall contain the information specified in 35 IAC 244.144.

- b. The Permittee shall immediately implement the appropriate steps described in this plan should an air pollution alert or emergency be declared.
- c. If a change occurs at the source which requires a revision of the plan (e.g., operational change, change in the source contact person), a copy of the revised plan shall be submitted to the Illinois EPA for review within 30 days of the change. Such plans shall be further revised if disapproved by the Illinois EPA.
- d. For sources required to have a plan pursuant to 35 IAC 244.142, a copy of the original plan and any subsequent revisions shall be sent to:
 - i. Illinois EPA, Compliance Section; and
 - ii. For sources located in Cook County and outside of the city of Chicago: Cook County Department of Environmental Control; or
 - iii. For sources located within the city of Chicago: Chicago Department of Environmental Control.
- 5.3 Non-Applicability of Regulations of Concern

This permit is issued based on the source not being subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because the source does not have a pollutant-specific emissions unit that uses an add-on control device to achieve compliance with an emission limitation or standard.

5.4 Source-Wide Operational and Production Limits and Work Practices

In addition to the source-wide requirements in the Standard Permit Conditions in Section 9, the Permittee shall fulfill the following source-wide operational and production limitations and/or work practice requirements:

None

- 5.5 Source-Wide Emission Limitations
 - 5.5.1 Permitted Emissions for Fees

The annual emissions from the source, not considering insignificant activities as addressed by Section 3.0 of this permit, shall not exceed the following limitations. The overall source emissions shall be determined by adding emissions from all emission units. Compliance with these limits shall be determined on a calendar year basis. These limitations (Condition 5.5.1) are set for the

purpose of establishing fees and are not federally enforceable.

Permitted Emissions of Regulated Pollutants

Pollutant	Tons/Year
Volatile Organic Material (VOM)	22.59
Sulfur Dioxide (SO ₂)	12.41
Particulate Matter (PM)	14.34
Nitrogen Oxides (NO _x)	130.09
HAP, not included in VOM or PM	8.95
Total	188.38

5.5.2 Emissions of Hazardous Air Pollutants

This permit is issued based on the emissions of HAPs as listed in Section 112(b) of the CAA not being equal to or exceeding 10 tons per year of a single HAP or 25 tons per year of any combination of such HAPs, so that this source is considered a minor source for HAPs.

5.5.3 Other Source-Wide Emission Limitations

The Permittee shall comply with the following source wide limits:

This permit is issued based on the total emissions from the source not exceeding the following limitations:

This permit is issued based on the total emissions from the source, i.e., the adjacent landfills (the Dixon/GROP #1 and #2 landfills (Owned by the City of Dixon BOA I.D. No. 103020ACD) and Lee county Landfill, Inc. (Owned by the Allied Waste, Inc. - CAAPP Permit Application No. 99090089 - BOA I.D. No. 103806AAL) and the landfill gas cogeneration/control facility (Dixon/Lee Energy Partners, L.L.C., BOA ID No. 103020ACJ) not exceeding the following limitation:

	Emissions
Pollutants	(Tons/Yr)
CO	225.0

This limit is based on the maximum annual landfill gas burned from engines utility flare of 859 mmscf/yr and 116 mmscf/yr, respectively.

The limit on carbon monoxide is a limitation established in Permit 99090063 issued to Dixon/Lee Energy Partners, L.L.C., pursuant to 40 CFR 52.21, Prevention of Significant Deterioration (PSD). These limits ensure that the construction and/or modification addressed in the

aforementioned permit does not constitute a new major source or major modification pursuant to Title I of the CAA, specifically the federal rules for Prevention of Significant Deterioration (PSD), 40 CFR 52.21. See Condition 7.1.6 [T1].

Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total).

5.6 General Recordkeeping Requirements

5.6.1 Emission Records

The Permittee shall maintain records of the following items for the source to demonstrate compliance with Condition 5.5.1 and 5.5.3, pursuant to Section 39.5(7)(b) of the Act:

- a. Monthly determination of compliance with Condition 5.5.3 based upon the procedure in 5.9.
- b. Total annual emissions on a calendar year basis for the emission units covered by Section 7 (Unit Specific Conditions) of this permit.
- 5.6.2 Records for Operating Scenarios

N/A

5.6.3 Retention and Availability of Records

- a. All records and logs required by this permit shall be retained for at least five years from the date of entry (unless a longer retention period is specified by the particular recordkeeping provision herein), shall be kept at a location at the source that is readily accessible to the Illinois EPA or USEPA, and shall be made available for inspection and copying by the Illinois EPA or USEPA upon request.
- b. The Permittee shall retrieve and print, on paper during normal source office hours, any records retained in an electronic format (e.g., computer) in response to an Illinois EPA or USEPA request for records during the course of a source inspection.

5.7 General Reporting Requirements

5.7.1 General Source-Wide Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section of deviations with the permit

requirements as follows, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken.

5.7.2 Annual Emissions Report

The annual emissions report required pursuant to Condition 9.7 shall contain emissions information for the previous calendar year.

5.8 General Operational Flexibility/Anticipated Operating Scenarios

N/A

- 5.9 General Compliance Procedures
 - 5.9.1 General Procedures for Calculating Emissions

Compliance with the source-wide emission limits specified in Condition 5.5 shall be based on the recordkeeping and reporting requirements of Conditions 5.6 and 5.7, and Compliance Procedures in Section 7 (Unit Specific Conditions) of this permit.

6.0 NOT APPLICABLE TO THIS PERMIT

7.0 UNIT SPECIFIC CONDITIONS

7.1 Unit 01: Electrical Generation Facility

Control: None

7.1.1 Description

The electrical generation facility utilizes landfill gas for the production of electricity. Additionally, the plant is also used to control landfill gas methane and NMOC emissions. The landfill gas is the only fuel used at the source. The gas is supplied by the adjacent closed Dixon/GROP #2 landfill (Phases II through V) which is owned by the City of Dixon BOA I.D. No. 103020ACD, and the Lee County Landfill which is owned and operated by Allied Waste, Inc. (See CAAPP Permit No. 99090089 - BOA I.D. No. 103806AAL).

The electrical generation facility consist of four (4) 987 kilowatt (kW) Jenbacher landfill gas fired gensets, a genset consists of an electrical generator powered by an internal combustion engine. Each genset has a rated heat input of 8.82 mmBtu/hr per engine (i.e., 44.1 mmBtu/hr total for 5 engines). In addition, the facility also has a candlestick (utility) flare that is used to control landfill gas during engine maintenance and repair and when excess landfill gas requires the flare to be used as backup.

Prior to it's use in the engines and/or candlestick flare, the landfill gas is treated in a treatment system which includes compression through blowers, a chiller (air to air cooler), de-watering (knock-out pot (tank) and demister pad), and filtration (Primary: dry 10-micron filter with a Secondary: dry 1-micron filter).

7.1.2 List of Emission Units and Air Pollution Control Equipment

		Emission
Emission		Control
Unit	Description	Equipment
Engine/Generator 1	Jenbacher	None
	Landfill Gas Fired Genset	
	(Model JGC 320 GS-L.L.) 1	
Engine/Generator 2	Jenbacher	None
	Landfill Gas Fired Genset	
	(Model JGC 320 GS-L.L.) 1	
Engine/Generator 3	Jenbacher	None
	Landfill Gas Fired Genset	
	(Model JGC 320 GS-L.L.) 1	
Engine/Generator 4	Jenbacher	None
	Landfill Gas Fired Genset	
	(Model JGC 320 GS-L.L.) 1	
	Candlestick Flare ¹	None

(Also See Attachment 10.1)

Landfill gas utilized in the above emission units is generated by Phases II through V of the Dixon/GROP #2 landfill (Owned by the City of Dixon BOA I.D. No. 103020ACD) and the Lee County Landfill (See CAAPP Permit No. 99090089 - BOA I.D. No. 103806AAL).

7.1.3 Applicability Provisions and Applicable Regulations

- a. The "affected emission units" for the purpose of these unit-specific conditions are the emission units described in Condition 7.1.1 and 7.1.2.
- b. The affected emission units are subject to the emission limits identified in Condition 5.2.2.
- c. The source (See Condition 5.1.4) is subject to the New Source Performance Standard (NSPS) for air emissions from Municipal Solid Waste Landfills, 40 CFR 60, Subparts A and WWW because the landfill associated with the source commenced construction, reconstruction or modification or began accepting waste on or after May 30, 1991. Illinois EPA is administrating NSPS in Illinois on behalf of the United States EPA under a delegation agreement and through Section 9.1 of the Illinois Environmental Protection Act.

At all times, the Permittee shall maintain and operate the affected emission units, including air pollution control equipment, in a manner consistent with good air pollution control practices for minimizing emissions, as required by the NSPS, 40 CFR 60.11(d).

The landfill gas pre-treatment system associated with the affected emission units (See Condition 7.1.1) has been determined by USEPA to qualify has a treatment system for purposes of 40 CFR 60.752(b)(2)(iii)(C) (See Attachment 6 - Scanned Copy of the Letter to Gregory J. Graetz - Derenzo and Associates, Inc. from George Czerniak - USEPA, dated December 9, 2003, provided in the application). Therefore, as per the USEPA determination, the affected emission units (i.e., NMOC control equipment) are no longer subject to the monitoring and recordkeeping requirements of the NSPS (i.e., 40 CFR 60.756(b) and 60.758(b) and (c)). If applicable, this determination does not include any emissions from any atmospheric vent from the gas treatment system, including any compressor, these emissions are subject to the requirements of 40 CFR 60.752 (b) (2) (iii) (A) and (B).

d. The source (See Condition 5.1.4) is subject to 40 CFR 63, Subparts A and AAAA — National Emission Standards for Hazardous Air Pollutants: Municipal Solid Waste Landfills. In this case, applicability is based upon the MSW landfill at the source meeting the criteria in 40 CFR 63.1935(a)(3). Additionally, the source is defined as an existing affected source based upon the criteria shown 40 CFR 63.1940.

Therefore, on or before January 16, 2004, the Permittee shall comply with the requirements in 40 CFR 63.1955(b) and 63.1960 through 63.1980. [40 CFR 63.1945(b) and 63.1945(f)]

The Permittee is required to comply with the requirements of the NESHAP 40 CFR 63 Subpart AAAA — National Emission Standards for Hazardous Air Pollutants: Municipal Solid Waste Landfills, and/or any amendments promulgated by USEPA. These requirements include but are limited to the following:

- i. Compliance with the requirements of 40 CFR 60, Subpart WWW. [40 CFR 63.1955(a)(1)]
- ii. Compliance with the requirements in 40 CFR 63.1960 through 63.1985 and with the general provisions specified in Table 1 of 40 CFR 63, Subpart AAAA. [40 CFR 63.1955(b)]
- If applicable, approval of collection and iii. control systems that include any alternatives to the operational standards, test methods, procedures, compliance measures, monitoring, recordkeeping or reporting provisions, you must follow the procedures in 40 CFR 60.752(b)(2). If alternatives have already been approved under 40 CFR 60, Subpart WWW or the Federal plan, or EPA approved and effective State or tribal plan, these alternatives can be used to comply with 40 CFR 63.1955(c), except that all affected sources must comply with the Startup, Shutdown, and Malfunction (SSM) requirements in 40 CFR 63 Subpart A of this part as specified in Table 1 of the NESHAP and all affected sources must submit compliance reports every 6 months as specified in 40 CFR 63.1980(a) and (b), including information on all deviations that occurred during the 6-month reporting period. Deviations for continuous emission monitors or

numerical continuous parameter monitors must be determined using a 3 hour monitoring block average. [40 CFR 63.1955(c)]

Compliance is determined in the same way it is iv. determined for 40 CFR 60, Subpart WWW, including performance testing, monitoring of the collection system, continuous parameter monitoring, and other credible evidence. addition, continuous parameter monitoring data, collected under 40 CFR 60.756(b)(1), (c)(1), and (d) of 40 CFR Subpart WWW, are used to demonstrate compliance with the operating conditions for control systems. a deviation occurs, you have failed to meet the control device operating conditions described in this subpart and have deviated from the requirements of this subpart. Finally, you must develop and implement a written SSM plan according to the provisions in 40 CFR 63.6(e)(3). A copy of the SSM plan must be maintained on site. Failures to write, implement, or maintain a copy of the SSM plan is a deviation from the requirements of this subpart. [40 CFR 63.1960]

It should be noted that as per Condition 7.1.3(c), the source is exempt from the control system monitoring provision of 40 CFR Part 60, Subpart WWW (i.e., 40 CFR 60.756(b)).

At all times, including periods of startup, shutdown, and malfunction, the owner or operator must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. During a period of startup, shutdown, or malfunction, this general duty to minimize emissions requires that the owner or operator reduce emissions from the affected source to the greatest extent which is consistent with safety and good air pollution control practices. The general duty to minimize emissions during a period of startup, shutdown, or malfunction does not require the owner or operator to achieve emission levels that would be required by the applicable standard at other times if this is not consistent with safety and good air pollution control practices, nor does it require the owner or operator to make any further efforts to reduce emissions if levels

required by the applicable standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Illinois EPA and/or USEPA which may include, but is not limited to, monitoring results, review of operation and maintenance procedures (including the startup, shutdown, and malfunction plan required in 40 CFR 63.6(e)(3)), review of operation and maintenance records, and inspection of the source. [40 CFR 63.6(e)(1)]

- v. A deviation is defined in 40 CFR 63.1990. For the purposes of the landfill monitoring and SSM plan requirements, deviations include the items in 40 CFR 63.1965(a) through (c). These include:
 - A. A deviation occurs when the control device operating parameter boundaries described in 40 CFR 60.758(c)(1) of subpart WWW are exceeded. [40 CFR 63.1965(a)]

It should be noted that as per Condition 7.1.3(c), the exceedances shown 40 CFR 60.758(c) (1) do not apply to the affected emission units.

- B. A deviation occurs when 1 hour or more of the hours during the 3-hour block averaging period does not constitute a valid hour of data. A valid hour of data must have measured values for at least three 15-minute monitoring periods within the hour. [40 CFR 63.1965(b)]
- C. A deviation occurs when a SSM plan is not developed, implemented, or maintained on site. [40 CFR 63.1965(c)]
- vi. Keep records and reports as specified in 40 CFR part 60 Subpart WWW, whichever applies to your landfill, with one exception: You must submit the annual report described in 40 CFR 60.757(f) every 6 months. [40 CFR 63.1980(a)]
- vii. You must also keep records and reports as specified in the general provisions of 40 CFR Part 60 and 63 as shown in Table 1 of 40 CFR 63, Subpart AAAA. Applicable records in the general provisions include items such as SSM

plans and the SSM plan reports. [40 CFR 63.1980(b)]

It should be noted that as per Condition 7.1.3(c), the source is exempt from the control system recordkeeping provisions of 40 CFR Part 60, Subpart WWW (i.e., 40 CFR 60.758(b) and (c)).

e. The affected emission units are subject to 35 IAC 214.301, which provides that:

No person shall cause or allow the emission of sulfur dioxide into the atmosphere from any process emission unit to exceed 2,000 ppm [35 IAC 214.301].

f. The affected emission units are subject to 35 IAC 215.301, which provides that:

No person shall cause or allow the discharge of more than $3.6~{\rm kg/hr}$ ($8~{\rm lb/hr}$) of organic material into the atmosphere from any emission unit, except as provided in $35~{\rm IAC}~215.302$, 215.303, or 215.304 and the following exemption: If no odor nuisance exists the limitation of $35~{\rm IAC}~215.301$ shall only apply to photochemically reactive material [$35~{\rm IAC}~215.301$].

7.1.4 Non-Applicability of Regulations of Concern

- a. This permit is issued based on the affected emission units not being subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because the affected emission units are subject to a NSPS proposed after November 15, 1990, pursuant to 40 CFR 64.2(b)(1)(i).
- b. This permit is issued based on the affected emission units not being subject to 40 CFR Part 72, Acid Rain Program, because each of the affected emission units serve one or more generators with the total nameplate capacity of 25 MWe or less, pursuant to 40 CFR 72.7(a)(1).

7.1.5 Control Requirements

- a. The Permittee is required to comply with the control requirements of the NSPS 40 CFR 60 Subpart WWW: Standards of Performance for Municipal Solid Waste Landfills (i.e., 40 CFR 60.752(b)(2)) and/or any amendments promulgated by USEPA. These requirements include but are limited to the following:
 - i. Submittal of a NMOC collection and control system design plan prepared by a professional

engineer to the Illinois EPA, Division of Air Pollution Control, Permit Section within 1 year. The NMOC collection and control system design plan shall include the information required under 40 CFR 60.752(b)(2)(i)(A), (B) and (C). [40 CFR 60.752(b)(2)(i)]:

- A. The Illinois EPA finds that the Landfill Gas Collection and Control System Design Plans, dated January 17, 2001, submitted for the Dixon/GROP #2 landfill (owned by the City of Dixon BOA I.D. No. 103020ACD) and the Lee County Landfill (see CAAPP Permit No. 99090089 BOA I.D. No. 103806AAL), respectively, to be acceptable and that they meet the requirements of 40 CFR 60.752(b)(2)(i)(A), (B), and (C). Deviations from or modifications to the plans must be approved by the Illinois EPA.
- ii. Installation of a collection and control system that captures the gas generated within the landfill, as required by 40 CFR 60.752(b)(2)(ii)(A) or (B) and 40 CFR 60.752(b)(2)(iii), within 30 months after the first annual report in which the emission rate equals or exceeds 50 megagrams per year, unless Tier 2 or Tier 3 NMOC sampling and analysis, as provided in 40 CFR 60.754(a)(3) and (4), respectively, demonstrates that the emission rate is less than 50 Megagrams per year, as specified in 40 CFR 60.757(c)(1) or (2). [40 CFR 60.752(b)(2)(ii)]
- iii. Routing of all collected landfill gas to a control system that complies with the requirements in either paragraph 40 CFR 60.752(b)(2)(iii)(A), (B) or (C). [40 CFR 60.752(b)(2)(iii)]
 - A. An open flare designed and operated in accordance with 40 CFR 60.18; [40 CFR 60.752(b)(2)(iii)(A)]
 - B. A control system designed and operated to reduce NMOC by 98 weight-percent, or, when an enclosed combustion device is used for control, to either reduce NMOC by 98 weight percent or reduce the outlet NMOC concentration to less than 20 parts per million by volume, dry basis as hexane at 3 percent oxygen. The

reduction efficiency or parts per million by volume shall be established by an initial performance test to be completed no later than 180 days after the initial startup of the approved control system using the test methods specified in 40 CFR 60.754(d). [40 CFR 60.752(b)(2)(iii)(B)]

- 1. If a boiler or process heater is used as the control device, the landfill gas stream shall be introduced into the flame zone.

 [40 CFR 60.752(b)(2)(iii)(B)(1)]
- The control device shall be operated within the parameter ranges established during the initial or most recent performance test. The operating parameters to be monitored are specified in 40 CFR 60.756; [40 CFR 60.752(b)(2)(iii)(B)(2)]
- C. Route the collected gas to a treatment system that processes the collected gas for subsequent sale or use. All emissions from any atmospheric vent from the gas treatment system shall be subject to the requirements of 40 CFR 60.752(b)(2)(iii) (A) or (B). [40 CFR 60.752(b)(2)(iii)(C)]

For purposes of compliance with the NSPS, the landfill gas pre-treatment system associated with the affected emission units (See Condition 7.1.1) has been determined by USEPA to qualify has a treatment system for purposes of 40 CFR 60.752(b)(2)(iii)(C) (See Condition 7.1.3(c)).

- iv. Operation of the collection and control device
 installed to comply with 40 CFR 60 Subpart WWW
 in accordance with the provisions of 40 CFR
 60.753, 60.755 and 60.756. [40 CFR
 60.752(b)(2)(iv)]
- v. The collection and control system may be capped or removed provided that all the conditions of 60.752(b)(2)(b)(2)(v)(A), (B), and (C) are met. [40 CFR 60.752(b)(2)(v)]

b. Open Flare Operational Requirements

The open flare shall be designed and operated in accordance with 40 CFR 60.18 (See Condition 7.1.5(a)(iii)(A)). This includes but is not limited to the following: [40 CFR 60.752(b)(2)(iii)(A)]

- i. The open flare shall be designed for and operated with no visible emissions as determined by the methods specified in 40 CFR 60.18(f), except for periods not to exceed a total of 5 minutes during any 2 consecutive hours. [40 CFR 60.18(c)(1)]
- ii. The open flare shall be operated with a flame present at all times while landfill gasses are being vented to it, as determined by the methods specified in 40 CFR 60.18(f). [40 CFR 60.18(c)(2)]
- iii. The Permittee has the choice of adhering to
 either the heat content specifications in 40
 CFR 60.18(c)(3)(ii) and the maximum tip
 velocity specifications in 40 CFR 60.18(c)(4),
 or adhering to the requirements in 40 CFR
 60.18(c)(3)(i). [40 CFR 60.18(c)(3)}
- iv. The Permittee shall monitor the open flare to
 ensure that they are operated and maintained
 in conformance with their designs. [40 CFR
 60.18(d)]
- v. The open flare shall be operated at all times when landfill gasses may be vented to them.
 [40 CFR 60.18(e)]
- vi. Reference Method 22 shall be used to determine the compliance of open flare with the visible emission provisions of this subpart. The observation period is 2 hours and shall be used according to Method 22. [40 CFR 60.18(f)(1)]
- vii. The presence of a flare pilot flame shall be monitored using a thermocouple or any other equivalent device to detect the presence of a flame. [40 CFR 60.18(f)(2)]
- viii. The net heating value of the gas being
 combusted in the open flare shall be
 calculated using the following equation: [40
 CFR 60.18(f)(3)]

$$\mathbf{H}_{\mathrm{T}} = \mathbf{K} \sum_{\mathrm{i}=1}^{\mathrm{n}} \mathbf{C}_{\mathrm{i}} \mathbf{H}_{\mathrm{i}}$$

Where:

 ${\rm H_T}={\rm Net}$ heating value of the sample, MJ/scm; where the net enthalpy per mole of offgas is based on combustion at 25°C and 760 mm Hg, but the standard temperature for determining the volume corresponding to one mole is 20°C;

K = Constant,

$$1.740 \times 10^7 \left(\frac{1}{\text{ppm}}\right) \left(\frac{\text{gmole}}{\text{scm}}\right) \left(\frac{\text{MJ}}{\text{Kcal}}\right)$$

Where the S tan dard Temperature for $\left(\frac{g - mole}{scm}\right)$ is 20°C

- C_i = Concentration of sample component i
 in ppm on a wet basis, as measured
 for organics by Reference Method 18
 and measured for hydrogen and
 carbon monoxide by ASTM D1946-77
 (Incorporated by reference as
 specified in §60.17); and
- ${
 m H_i}$ = Net heat of combustion of sample component i, kcal/g mole at 25°C and 760 mm Hg. The heats of combustion may be determined using ASTM D2382-76 (incorporated by reference as specified in $\S60.17$) if published values are not available or cannot be calculated.
- ix. The actual exit velocity of a flare shall be determined by dividing the volumetric flowrate (in units of standard temperature and pressure), as determined by Reference Methods 2, 2A, 2C, or 2D as appropriate; by the unobstructed (free) cross sectional area of the flare tip. [40 CFR 60.18(f)(4)]
- x. The maximum permitted velocity, V_{max} , for a flare shall be determined by the following equation. [40 CFR 60.18(f)(6)]

$$V_{max} = 8.706 + 0.7084 (H_T)$$

Where:

 V_{max} = Maximum permitted velocity, m/sec

8.706 = Constant

0.7084 = Constant

 H_T = The net heating value as determined in accordance with 40 CFR 60.18(f)(3).

7.1.6 Emission Limitations

In addition to Condition 5.2.2 and the source wide emission limitations in Condition 5.5.3, the affected emission units are subject to the following:

a. Landfill Gas Fired Gensets

Total combined operation and emissions from the engines shall not exceed the following limits:

			Total Emis	ssions for
	Emissions	Per Engine	All E	ngines
	(Lb/Hr)	(Ton/Yr)	(Lb/Hr)	(Ton/Yr)
NO_x	5.10	22.34	25.50	111.69
CO	9.20	40.20	46.00	201.00
MOV	0.76	3.33	3.82	16.74
PM_{10}	0.52	2.29	2.60	11.45
SO_2	0.33	1.43	1.65	7.15

These limits are based on maximum combined landfill gas usage for engines (859 $\rm mmscf/yr)$, operating hours (8,760 $\rm hr/yr)$, and emission factors listed in Condition 10.

Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total) [T1].

The above limitations were established in Permit 99090063 issued to Dixon/Lee Energy Partners, L.L.C., pursuant to 40 CFR 52.21, Prevention of Significant Deterioration (PSD). These limits ensure that the construction and/or modification addressed in the aforementioned permit does not constitute a new major source or major modification pursuant to Title I of the CAA, specifically the federal rules for Prevention of Significant Deterioration (PSD), 40 CFR 52.21 [T1].

b. Candlestick Flare

Emissions of sulfur dioxide (SO_2) , carbon monoxide (CO), nitrogen oxides (NO_x) and volatile organic material (VOM) and operation of the centralized active landfill gas fired flare shall not exceed the following limits:

- i. Maximum hours of operation 24 hours per day, 7 days per week, 52 weeks per year and 8760 hours per year.
- ii. Maximum landfill gas loading to the flare = 1,200 scfm.
- iii. The landfill gas consumption of the utility flare in million standard cubic feet (mmscf) shall not exceed 1.73 mmscf/day and 632 mmscf/year.

iv. Emissions:

SO_2	NO_x	CO	MOV	PM	
1.20	4.20	30.0	1.34	0.66	lb/hr
5.26	18.40	131.40	5.85	2.89	ton/year

These limits are based on standard emission factors and emission calculation procedures and the maximum flare capacity, and maximum hours of operation indicated in the application.

Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total) [T1].

The above limitations contain revisions to previously issued Permit 95040093 issued to the City of Dixon (BOA I.D. No. 103020ACD). The source has requested that the Illinois EPA establish conditions in this permit that allow various refinements from the conditions of this aforementioned permit, consistent with the information provided in the CAAPP application. The source has requested these revisions and has addressed the applicability and compliance of Title I of the CAA, specifically 35 IAC Part 203, Major Stationary Sources Construction and Modification and/or 40 CFR 52.21, Prevention of Significant Deterioration (PSD). These limits continue to

ensure that the construction and/or modification addressed in this permit does not constitute a new major source or major modification pursuant to these rules. These limits are the primary enforcement mechanism for the equipment and activities permitted in this permit and the information in the CAAPP application contains the most current and accurate information for the source. Specifically, this permit revises the previously established particulate matter limitation based upon a updated emissions estimate [T1R].

7.1.7 Testing Requirements

- a. The Permittee is required to comply with the testing requirements of the NSPS 40 CFR 60 Subpart WWW:

 Standards of Performance for Municipal Solid Waste Landfills (i.e., 40 CFR 60.754) and/or any amendments promulgated by USEPA. These requirements include but are limited to the following:
 - i. When calculating emissions for PSD purposes, the Permittee of each MSW landfill subject to the provisions of 40 CFR 60 Subpart WWW shall estimate the NMOC emission rate for comparison to the PSD major source and significance levels in 35 IAC 203 (40 CFR 51.166) or 40 CFR 52.21 using AP-42 or other approved measurement procedures. [40 CFR 60.754(c)]
 - ii. For the performance test required in 40 CFR 60.752(b)(2)(iii)(B), Method 25, 25A, 25C or Method 18 of Appendix A of 40 CFR Part 60 (or any other Method approved by the Illinois EPA or USEPA) shall be used to determine compliance with 98 weight-percent efficiency or the 20 ppmv outlet concentration level, unless another method to demonstrate compliance has been approved by the USEPA or Illinois EPA as provided by 40 CFR 60.752(b)(2)(i)(B). If using Method 18 of Appendix A of 40 CFR Part 60, the minimum list of compounds to be tested shall be those published in the most recent Compilation of Air Pollutant Emission Factors (AP 42). The following equation shall be used to calculate efficiency: [40 CFR 60.754(d)]

Control Efficiency = $(NMOC_{in} - NMOC_{out})/NMOC_{in}$

Where:

 $\mathrm{NMOC_{in}} = \mathrm{Mass} \ \mathrm{of} \ \mathrm{NMOC} \ \mathrm{entering} \ \mathrm{control}$ device

 $NMOC_{out} = Mass of NMOC exiting control device$

It should be noted that the performance test required in 40 CFR 60.752(b)(2)(iii)(B) is not applicable, in this case, purposes of compliance with the NSPS, since the landfill gas pre-treatment system associated with the affected emission units (See Condition 7.1.1) has been determined by USEPA to qualify has a treatment system for purposes of 40 CFR 60.752(b)(2)(iii)(C) (See Condition 7.1.3(c)).

- b. The Permittee shall sample and analyze the landfill gas entering the control system(s) at least once per year. This analyses shall include determinations for the following: heat value and methane content. The Permittee is allowed to use landfill gas analyses performed by an independent company. The Permittee is required to make the above determinations based upon the average of three consecutive test runs. Written notification of testing or submittal of a formal testing protocol is not required for these tests. [35 IAC 201.282]
- c. An annual performance test must be performed on the open (utility) flare. These tests shall include visible emission readings, landfill gas heat content determination, flow rate or bypass flow rate measurements based upon gas flow rate measuring device required in Condition 7.1.9, and exit velocity, required under 60.18. The Permittee is allowed to use the results of the testing required in Condition 7.1.8(b) as part of these tests. [35 IAC 201.282]
- d. Within 90 days of a written request from the Illinois EPA, the Permittee shall perform emissions and/or performance tests specified by the Illinois EPA. [40 CFR 60.8(a) and 35 IAC 201.282] The 90 day time period will automatically be extended for an additional 60 days upon written request by the Permittee. The Illinois EPA may provide additional time for the performance of these tests upon written request by the Permittee.

7.1.8 Monitoring Requirements

a. The Permittee is required to comply with the monitoring requirements of the NSPS 40 CFR 60 Subpart WWW: Standards of Performance for Municipal Solid Waste Landfills (i.e., 40 CFR 60.756) and/or any

amendments promulgated by USEPA. These requirements include but are limited to the following:

- i. The following procedures shall be used for compliance with the surface methane operational standard as provided in 40 CFR 60.753(d). [40 CFR 60.755(c)]
 - A. After installation of the collection system, the Permittee shall monitor surface concentrations of methane along the entire perimeter of the collection area and along a pattern that traverses the landfill at 30 meter intervals (or a site-specific established spacing) for each collection area on a quarterly basis using an organic vapor analyzer, flame ionization detector, or other portable monitor meeting the specifications provided in paragraph (d) of this section. [40 CFR 60.755(c)(1)]
 - B. The background concentration shall be determined by moving the probe inlet upwind and downwind outside the boundary of the landfill at a distance of at least 30 meters from the perimeter wells. [40 CFR 60.755(c)(2)]
 - C. Surface emission monitoring shall be performed in accordance with section 4.3.1 of Method 21 of Appendix A of 40 CFR Part 60, except that the probe inlet shall be placed within 5 to 10 centimeters of the ground. Monitoring shall be performed during typical meteorological conditions. [40 CFR 60.755(c)(3)]
 - D. Any reading of 500 parts per million or more above background at any location shall be recorded as a monitored exceedance and the actions specified in 40 CFR 60.755(c)(i) through (v) shall be taken. As long as the specified actions are taken, the exceedance is not a violation of the operational requirements of 40 CFR 60.753(d). [40 CFR 60.755(c)(4)]
 - E. The Permittee shall implement a program to monitor for cover integrity and implement cover repairs as necessary on a monthly basis. [40 CFR 60.755(c)(5)]

- ii. The Permittee shall comply with the instrumentation specifications and procedures for surface emission monitoring devices in 40 CFR 60.755(d). [40 CFR 60.755(d)]
- iii. The gas collection and control requirements of 40 CFR 60 Subpart WWW shall apply at all times, except during periods of start-up, shutdown, or malfunction, provided that the duration of start-up, shutdown, or malfunction shall not exceed 5 days for collection systems and shall not exceed 1 hour for treatment or control devices. [40 CFR 60.755(e)]
- iv. Except as provided in 40 CFR
 60.752(b)(2)(i)(B),
 - A. The Permittee shall install a sampling port and a thermometer, or other temperature measuring device, or an access port for temperature measurements at each wellhead and: [40 CFR 60.756(a)]
 - 1. Measure the gauge pressure in the gas collection header on a monthly basis as provided in 40 CFR 60.755(a)(3); and [40 CFR 60.756(a)(1)]
 - 2. Monitor nitrogen or oxygen concentration in the landfill gas on a monthly basis as provided in 40 CFR 60.755(a)(5); and [40 CFR 60.756(a)(2)]
 - 3. Monitor temperature of the landfill gas on a monthly basis as provided in 40 CFR 60.755(a)(5). [40 CFR 60.756(a)(3)]
 - B. If the Permittee elects to comply with 40 CFR 60.752(b)(2)(iii) using an enclosed combustor, the Permittee shall calibrate, maintain, and operate according to the manufacturer's specifications, the following equipment. [40 CFR 60.756(b)]
 - A temperature monitoring device equipped with a continuous recorder and having a minimum accuracy of ±1 percent of the temperature being measured expressed in degrees
 Celsius or ± 0.5 degrees Celsius,

whichever is greater. A temperature monitoring device is not required for boilers or process heaters with design heat input capacity equal to or greater than 44 megawatts. [40 CFR 60.756(b)(1)]

- 2. A device that records flow to or bypass of the control device. The Permittee shall either: [40 CFR 60.756(b)(2)]
 - Install, calibrate, and maintain a gas flow rate measuring device that shall record the flow to the control device at least every 15 minutes; or [40 CFR 60.756(b)(2)(i)]
 - II. Secure the bypass line valve in the closed position with a car-seal or a lock-and-key type configuration. A visual inspection of the seal or closure mechanism shall be performed at least once every month to ensure that the valve is maintained in the closed position and that the gas flow is not diverted through the bypass line. [40 CFR 60.756(b)(2)(ii)]

It should be noted that as per Condition 7.1.3(c), the source is exempt from the control system monitoring provision of 40 CFR Part 60, Subpart WWW (i.e., 40 CFR 60.756(b)).

b. Landfill Gas Fired Gensets

Each owner or operator seeking to comply with 40 60.752(b)(2)(iii) using an enclosed combustor shall calibrate, maintain, and operate according to the manufacturer's specifications, the following equipment. [40 CFR 60.756(b)]

A temperature monitoring device equipped with a continuous recorder and having a minimum accuracy of ± 1 percent of the temperature being measured expressed in degrees Celsius or ± 0.5 degrees Celsius, whichever is greater. A temperature monitoring device is not required for boilers or process heaters

with design heat input capacity equal to or greater than 44 megawatts. [40 CFR 60.756(b)(1)]

It should be noted that as per Condition 7.1.3(c), the source is exempt from the control system monitoring provision of 40 CFR Part 60, Subpart WWW (i.e., 40 CFR 60.756(b)).

c. Candlestick Flare

Each owner or operator seeking to comply with 40 CFR 60.752(c) using an open flare shall install, calibrate, maintain, and operate according to the manufacturer's specifications the following equipment: [40 CFR 60.756(c)]

A heat sensing device, such as an ultraviolet beam sensor or thermocouple, at the pilot light or the flame itself to indicate the continuous presence of a flame. [40 CFR 60.756(c)(1)]

d. The Permittee shall calibrate, maintain, and operate according to the manufacturer's specifications, the following equipment: [40 CFR 60.756(b) and (c) and 35 IAC 201.281]

A gas flow rate measuring device that provides a measurement of gas flow to the control system and bypass of the control system. The owner or operator shall either:

- i. Install, calibrate, and maintain a gas flow rate measuring device that shall record the flow to the control system at least every 15 minutes; or
- ii. Secure the bypass line valve(s) in the closed position with a car-seal or a lock-and-key type configuration. A visual inspection of the seal or closure mechanism shall be performed at least once every month to ensure that the valve(s) are maintained in the closed position and that the gas flow is not diverted through the bypass line(s).

7.1.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for each affected emission unit to demonstrate compliance with Conditions 5.5.1; 7.1.3 and 7.1.5 through 7.1.8; and, pursuant to Section 39.5(7)(b) of the Act:

a. The Permittee shall keep records as specified in the general provisions of 40 CFR Part 60 and 63 as shown in Table 1 of 40 CFR 63, Subpart AAAA. Applicable records in the general provisions include items such as SSM plans and the SSM plan reports specified 40 CFR 63, Subparts A and AAAA. These records shall include but are not limited to the following:

i. General Records

The Permittee shall maintain relevant records for such source of [40 CFR 60.7(b) and 63.10(b)]

- A. The occurrence and duration of each startup, shutdown, or malfunction of operation (i.e., process equipment);
- B. The occurrence and duration of each malfunction of the required air pollution control and monitoring equipment;
- C. All required maintenance performed on the air pollution control and monitoring equipment;
- D. Actions taken during periods of startup, shutdown, and malfunction (including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation) when such actions are different from the procedures specified in the affected source's startup, shutdown, and malfunction plan (see 40 CFR 63.6(e)(3));
- E. All information necessary to demonstrate conformance with the affected source's startup, shutdown, and malfunction plan (see 40 CFR 63.6(e)(3)) when all actions taken during periods of startup, shutdown, and malfunction (including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation) are consistent with the procedures specified in such plan. (The information needed to demonstrate conformance with the startup, shutdown, and malfunction plan may be recorded using a "checklist," or some other effective form of recordkeeping, in

- order to minimize the recordkeeping burden for conforming events);
- F. All required measurements needed to demonstrate compliance with a relevant standard (including, but not limited to, 15-minute averages of CMS data, raw performance testing measurements, and raw performance evaluation measurements, that support data that the source is required to report);
- G. All results of performance tests, CMS performance evaluations, and opacity and visible emission observations;
- H. All measurements as may be necessary to determine the conditions of performance tests and performance evaluations;
- I. All CMS calibration checks;
- J. All adjustments and maintenance performed on CMS; and
- K. All documentation supporting initial notifications and notifications of compliance status under 40 CFR 60.7 and 63.9.
- ii. Additional recordkeeping requirements for sources with continuous monitoring systems. In addition to complying with the requirements specified in 40 CFR 63.10(b)(1) and (b)(2), the owner or operator of an affected source required to install a CMS by a relevant standard shall maintain records for such source of— [40 CFR 63.10(c)]
 - A. All required CMS measurements (including monitoring data recorded during unavoidable CMS breakdowns and out-of-control periods) [40 CFR 63.10(c)(1)];
 - B. The date and time identifying each period during which the CMS was inoperative except for zero (low-level) and highlevel checks [40 CFR 63.10(c)(5)];
 - C. The date and time identifying each period during which the CMS was out of control, as defined in 40 CFR 63.8(c)(7) [40 CFR 63.10(c)(6)];

- D. The specific identification (i.e., the date and time of commencement and completion) of each period of excess emissions and parameter monitoring exceedances, as defined in the relevant standard(s), that occurs during startups, shutdowns, and malfunctions of the affected source [40 CFR 63.10(c)(7)];
- E. The specific identification (i.e., the date and time of commencement and completion) of each time period of excess emissions and parameter monitoring exceedances, as defined in the relevant standard(s), that occurs during periods other than startups, shutdowns, and malfunctions of the affected source [40 CFR 63.10(c)(8)];
- F. The nature and cause of any malfunction
 (if known) [40 CFR 63.10(c)(10)];
- G. The corrective action taken or preventive measures adopted [40 CFR 63.10(c)(11)];
- H. The nature of the repairs or adjustments to the CMS that was inoperative or out of control [40 CFR 63.10(c)(12)];
- The total process operating time during the reporting period [40 CFR 63.10(c)(13)]; and
- J. All procedures that are part of a quality
 control program developed and implemented
 for CMS under 40 CFR 63.8(d). [40 CFR
 63.10(c)(14)]

In order to satisfy the requirements of 40 CFR 63.10(c)(10) through (c)(12) and to avoid duplicative recordkeeping efforts, the owner or operator may use the affected source's startup, shutdown, and malfunction plan or records kept to satisfy the recordkeeping requirements of the startup, shutdown, and malfunction plan specified in 40 CFR 63.6(e), provided that such plan and records adequately address the requirements of 40 CFR 63.10(c)(10) through (c)(12).

b. The Permittee shall keep all records required under 40 CFR 60 Subpart WWW and records to demonstrate compliance with Conditions 5.5, 7.1.3, 7.1.5, 7.1.6,

- 7.1.7 and 7.1.8. These records shall include but are not limited to the following: [35 IAC 201.281]
- i. A maintenance and repair log for each affected emission unit, detailing equipment inspections and repairs, each activity performed with date ...etc.
- ii. Up-to-date, readily accessible continuous records of the landfill gas flow to the control system (Monthly and annual). Annual landfill gas usage shall be determined each month based on the current month of record's usage plus the usage for the preceding 11 months.
- iii. Operating hours for each of the affected emission units.
- iv. Copies of any landfill gas analyses and net heating value determinations, including those required under Conditions 7.1.5 and 7.1.8 or as a part of a compliance determination under Condition 7.1.12, that may be conducted during the normal operation of the gas collection system.
- v. Total annual NO_x , PM, SO_2 , CO, and VOM emissions from the affected emission units, based on the current month of records months landfill gas usage plus the usage for the preceding 11 and the applicable emission factors, with supporting calculations.
- vi. Copies of USEPA or Illinois EPA approval of alternative testing, monitoring, and compliance procedures in Conditions 7.1.5, 7.1.8, 7.1.9 and 7.1.12.
- vii. Landfill Gas Fired Gensets
 - A. The average combustion temperature measured at least every 15 minutes and averaged over the same time period of the performance test. [40 CFR 60.758(b)(2)(i)]
 - B. The percent reduction of NMOC determined as specified in Condition 7.1.7(a) (See 40 CFR 60.752(b)(2)(iii)(B)) achieved by the control device. [40 CFR 60.758(b)(2)(ii)]

It should be noted that as per Condition 7.1.3(c), the source is exempt from the control system recordkeeping provisions of 40 CFR Part 60, Subpart WWW (i.e., 40 CFR 60.758(b) and (c)).

viii. Candlestick Flare

Records indicating the flare type (i.e., steam-assisted, air-assisted, or nonassisted), all visible emission readings, heat content determination, flow rate or bypass flow rate measurements, and exit velocity determinations made during the performance test as specified in 40 CFR 60.18; continuous records of the flare pilot flame or flare flame monitoring and records of all periods of operations during which the pilot flame of the flare flame is absent. [35 IAC 201.281]

- ix. Copies of all performance tests performed pursuant to the requirements of 40 CFR 60 Subparts A and WWW.
- c. The Permittee shall keep for 5 years up-to-date, readily accessible continuous records of the equipment operating parameters specified to be monitored in Condition 7.1.8 (See 40 CFR 60.756) as well as up-to-date, readily accessible records for periods of operation during which the parameter boundaries established during the most recent performance test are exceeded. [40 CFR 60.758(c)]

The following constitute exceedances that shall be recorded and reported under 40 CFR 60.757(f) and condition 7.1.10(a)(ii): 40 CFR 60.758(c)(1)

For enclosed combustors except for boilers and process heaters with design heat input capacity of 44 megawatts (150 million British thermal unit per hour) or greater, all 3-hour periods of operation during which the average combustion temperature was more than 28°C below the average combustion temperature during the most recent performance test at which compliance with 40 CFR 60.752(b)(2)(iii) was determined. [40 CFR 60.758(c)(1)(i)}

The Permittee shall keep records of any periods of operation during which any affected emission unit exceed the operating parameters preset by the affected emission unit's manufacture or those established by the most recent performance test at which compliance with 40 CFR 60.332, 60.333, and

60.752(b)(2)(iii) was determined or permit limitations were established. [35 IAC 201.281]

It should be noted that as per Condition 7.1.3(c), the source is exempt from the control system recordkeeping provisions of 40 CFR Part 60, Subpart WWW (i.e., 40 CFR 60.758(b) and (c)).

- d. The Permittee shall keep up-to-date records of the indication of flow to the control system or the monitoring conducted pursuant to Condition 7.1.8© and (d). This includes but is not limited to an indication of bypass flow or records of monthly inspections of car-seals or lock-and-key configurations used to seal bypass lines, specified under 40 CFR 60.756. [35 IAC 201.281]
- e. Records shall be retained for five years and shall be readily available for inspection and copying by the Illinois EPA upon request. Off-site records may be maintained if they are retrievable within 4 hours. Either paper copy or electronic formats are acceptable.

7.1.10 Reporting Requirements

- a. The Permittee shall promptly notify the Illinois EPA, Compliance Section of non-compliance with the operating requirements and emissions limitations of this permit. This shall include:
 - i. Emissions of NO_x , PM, SO_2 , CO, or VOM in excess of the limits in Condition 5.5 and 7.1.6, calculated by using emission factors and equation from Condition 7.1.12 based on the current month's records plus the preceding 11 months within 30 days of such an occurrence.
 - ii. Notification within 60 days of operation of an affected emission unit that may not have been in compliance with the opacity limitations of Condition 5.2.2, as determined from the records required by Condition 7.1.9(e), with a copy of such record for each incident.
 - iii. If there is any other exceedance of the requirements of this permit as determined by the records required by this permit, the Permittee shall submit a report to the Illinois EPA within 30 days after the exceedance. The report shall include the emissions released in accordance with recordkeeping requirements, a copy of the relevant records, and a description of the

exceedances or violation and efforts to reduce emissions and future occurrences.

b. 40 CFR 60 Subparts WWW and 40 CFR 63 Subpart AAAA

The Permittee is required to provide reports as specified in the general provisions of 40 CFR Part 60 and Part 63 (See Table 1 of 40 CFR 63 Subpart AAAA). Applicable reports include the SSM plan reports.

In this case, reportable exceedances and deviations, pursuant to 40 CFR 60 Subparts WWW and 40 CFR 63 Subpart AAAA, are defined under 40 CFR 60.758(c) and 40 CFR 63.1965 and 63.1990. [40 CFR 60.757(f) and 40 CFR 63.1980(a)]

- i. Value and length of time for exceedance of applicable parameters monitored under 40 CFR 60.756(a), (b), (c), and (d). [40 CFR 60.757(f)(1)]
- ii. Description and duration of all periods when the gas stream is diverted from the control device through a bypass line or the indication of bypass flow as specified under 40 CFR 60.756. [40 CFR 60.757(f)(2)]
- iii. Description and duration of all periods when the control device was not operating for a period exceeding 1 hour and length of time the control device was not operating. [40 CFR 60.757(f)(3)]
- iv. All periods when the collection system was not operating in excess of 5 days. [40 CFR 60.757(f)(4)]
- v. The location of each exceedance of the 500 parts per million methane concentration as provided in 40 CFR 60.753(d) and the concentration recorded at each location for which an exceedance was recorded in the previous month. [40 CFR 60.757(f)(5)]
- vi. The date of installation and the location of each well or collection system expansion added pursuant to 40 CFR 60.755(a)(3), (b), and (c)(4). [40 CFR 60.757(f)(5)]
- vii. A notification of any physical or operational change to an existing facility which may increase the emission rate of any air pollutant to which a standard applies, unless that change is specifically exempted under an applicable subpart

or in 40 CFR 60.14(e). This notice shall be postmarked 60 days or as soon as practicable before the change is commenced and shall include information describing the precise nature of the change, present and proposed emission control systems, productive capacity of the facility before and after the change, and the expected completion date of the change. The Illinois EPA may request additional relevant information subsequent to this notice. [40 CFR 60.7(a)(4)]

7.1.11 Operational Flexibility/Anticipated Operating Scenarios

The Permittee is authorized to make the following physical or operational change with respect to an affected emission unit without prior notification to the Illinois EPA or revision of this permit. This condition does not affect the Permittee's obligation to properly obtain a construction permit in a timely manner for any activity constituting construction or modification of the source, as defined in 35 IAC 201.102:

None

7.1.12 Compliance Procedures

a. Compliance with the emission limits in Conditions 5.5 and 7.1.6 shall be based on the recordkeeping requirements in Condition 7.1.9 and calculated based on the emission factors and formulas listed below:

i. Engines

Pollutant	Emission Rates per Engine (Lb/Hr)	Notes
PM	0.52	1
NO_x	5.10	2
SO_2	0.33	3
VOM	0.76	4
CO	9.20	5

Notes:

- 1. Emissions factor based upon the AP-42 emission factor (48 lb/10⁶ dscf methane), an average landfill gas methane concentration of 55%, and the maximum gas flow rate (fuel consumption) provided by the engine manufacturer (327 scfm).
- 2. Emission factor provided by the engine manufacturer (1.67 g/bhp-hr) and the

maximum braking horsepower of the engine (1387 bhp).

- 3. Emissions factor based upon the calculation procedures in AP-42 and the maximum gas flow rate (fuel consumption) provided by the engine manufacturer (327 scfm). Which is based upon a landfill gas lower heating value of 450 Btu/scf and the maximum manufacturer's rated heat input of 8.817 mmBtu/hr.
- 4. Emission factor provided by the engine manufacturer (0.25 g/bhp-hr) and the maximum braking horsepower of the engine (1387 bhp).
- 5. Emission factor provided by the engine manufacturer (3.0 g/bhp-hr) and the maximum braking horsepower of the engine (1387 bhp).

Engine Emissions (lb) = appropriate emission factor x total operating hours of the engines

ii. Flare Emissions

<u>Pollutant</u>	Em	ission Factor	Note
		lb/hr	
CO	30.0		1
NO_x	4.20		2
PM/PM_{10}		0.67 lb/hr	3
SO_2		1.20 lb/hr	4
VOM	1.34		5

Notes

- 1 Emission factor (0.833 lb/mmBtu) and the maximum flare landfill gas usage (1,200 scfm) and a LFG heat content of 500 Btu/scf.
- Emission factor (0.117 lb/mmBtu) and the maximum flare landfill gas usage (1,200 scfm) and a LFG heat content of 500 Btu/scf.
- 3. Emissions factor based upon the calculation procedures in AP-42 (17 lb/10⁶ dscf methane), the maximum flare landfill gas usage (1,200 scfm), and the default AP 42 methane concentration of 55%.

- 4. Emissions factor based upon the calculation procedures in AP-42 (8.23 lb/mmscf landfill gas), the default AP 42 sulfur concentration of 46.9 ppm, and the maximum flare landfill gas usage (1,200 scfm).
- 5. Emissions factor based upon the calculation procedures in AP-42, the default AP 42 NMOC concentration of 595 ppm, the default AP-42 percent NMOC reduction of 99 percent and the maximum flare landfill gas usage (1,200 scfm).

Engine Emissions (lb) = appropriate emission factor x total operating hours of the flare

Landfill gas flow and methane concentration shall be based upon the records required under Condition 7.1.9(a).

Unless approved in writing by the Illinois EPA, the results of source testing shall take precedence over the emission factors and calculation procedures shown above.

For the purpose of estimating methane, NMOC, VOM, SO₂ and HAP (compliance with limitations shown in Condition 5.5.2) emissions, emissions may be calculated based upon the monitoring, recordkeeping, and reporting requirements in Conditions 7.1.8, 7.1.9, and 7.1.10; the USEPA Landfill Gas Emissions Model (See http://www.epa.gov/ttn/chief and AP-42, Chapter 2.4) and the control equipment efficiencies shown in AP-42, Chapter 2.4. The Permittee is allowed to use site-specific NMOC concentration and/or methane generation rate constant (k) determined through the procedures shown 40 CFR 60.754(a). In addition, the Permittee is allowed to use site specific HAP, VOM, and SO_2 (i.e., sulfur concentration) emissions data recorded during landfill gas testing provided that full documentation and emissions calculations data is provided as part of the emission report. It should be noted that approval must be made in writing for any changes made to standard USEPA methods.

Default factor values are as follows:

Sulfur Concentration 46.9 ppm
Methane Concentration 55%
NMOC Concentration 595 ppm
Percent NMOC Reduction 99%

8.0 GENERAL PERMIT CONDITIONS

8.1 Permit Shield

Pursuant to Section 39.5(7)(j) of the Act, the Permittee has requested and has been granted a permit shield. This permit shield provides that compliance with the conditions of this permit shall be deemed compliance with applicable requirements which were applicable as of the date the proposed permit for this source was issued, provided that either the applicable requirements are specifically identified within this permit, or the Illinois EPA, in acting on this permit application, has determined that other requirements specifically identified are not applicable to this source and this determination (or a concise summary thereof) is included in this permit.

This permit shield does not extend to applicable requirements which are promulgated after September 23, 2004 (the date of issuance of the draft permit) unless this permit has been modified to reflect such new requirements.

8.2 Applicability of Title IV Requirements (Acid Deposition Control)

This source is not an affected source under Title IV of the CAA and is not subject to requirements pursuant to Title IV of the CAA.

8.3 Emissions Trading Programs

No permit revision shall be required for increases in emissions allowed under any USEPA approved economic incentives, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for elsewhere in this permit and that are authorized by the applicable requirement [Section 39.5(7)(o)(vii) of the Act].

As of the date of issuance of this permit, there are no such economic incentive, marketable permit or emission trading programs that have been approved by USEPA.

- 8.4 Operational Flexibility/Anticipated Operating Scenarios
 - 8.4.1 Changes Specifically Addressed by Permit

Physical or operational changes specifically addressed by the Conditions of this permit that have been identified as not requiring Illinois EPA notification may be implemented without prior notice to the Illinois EPA.

8.4.2 Changes Requiring Prior Notification

The Permittee is authorized to make physical or operational changes that contravene express permit terms without applying for or obtaining an amendment to this

permit, provided that [Section 39.5(12)(a)(i) of the Act]:

- a. The changes do not violate applicable requirements;
- b. The changes do not contravene federally enforceable permit terms or conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements;
- c. The changes do not constitute a modification under Title I of the CAA;
- d. Emissions will not exceed the emissions allowed under this permit following implementation of the physical or operational change; and
- e. The Permittee provides written notice to the Illinois EPA, Division of Air Pollution Control, Permit Section, at least 7 days before commencement of the change. This notice shall:
 - i. Describe the physical or operational change;
 - ii. Identify the schedule for implementing the physical or operational change;
 - iii. Provide a statement of whether or not any New Source Performance Standard (NSPS) is applicable to the physical or operational change and the reason why the NSPS does or does not apply;
 - iv. Provide emission calculations which demonstrate that the physical or operational change will not result in a modification; and
 - v. Provide a certification that the physical or operational change will not result in emissions greater than authorized under the Conditions of this permit.

8.5 Testing Procedures

Tests conducted to measure composition of materials, efficiency of pollution control devices, emissions from process or control equipment, or other parameters shall be conducted using standard test methods. Documentation of the test date, conditions, methodologies, calculations, and test results shall be retained pursuant to the recordkeeping procedures of this permit. Reports of any tests conducted as required by this permit or as the result of a request by the Illinois EPA shall be submitted as specified in Condition 8.6.

8.6 Reporting Requirements

8.6.1 Monitoring Reports

If monitoring is required by any applicable requirements or conditions of this permit, a report summarizing the required monitoring results, as specified in the conditions of this permit, shall be submitted to the Air Compliance Section of the Illinois EPA every six months as follows [Section 39.5(7)(f) of the Act]:

Monitoring Period

Report Due Date

January - June

September 1

July - December

March 1

All instances of deviations from permit requirements must be clearly identified in such reports. All such reports shall be certified in accordance with Condition 9.9.

8.6.2 Test Notifications

Unless otherwise specified elsewhere in this permit, a written test plan for any test required by this permit shall be submitted to the Illinois EPA for review at least 60 days prior to the testing pursuant to Section 39.5(7)(a) of the Act. The notification shall include at a minimum:

- a. The name and identification of the affected unit(s);
- b. The person(s) who will be performing sampling and analysis and their experience with similar tests;
- c. The specific conditions under which testing will be performed, including a discussion of why these conditions will be representative of maximum emissions and the means by which the operating parameters for the source and any control equipment will be determined;
- d. The specific determination of emissions and operation which are intended to be made, including sampling and monitoring locations;
- e. The test method(s) which will be used, with the specific analysis method, if the method can be used with different analysis methods;
- f. Any minor changes in standard methodology proposed to accommodate the specific circumstances of testing, with justification; and

g. Any proposed use of an alternative test method, with detailed justification.

8.6.3 Test Reports

Unless otherwise specified elsewhere in this permit, the results of any test required by this permit shall be submitted to the Illinois EPA within 60 days of completion of the testing. The test report shall include at a minimum [Section 39.5(7)(e)(i) of the Act]:

- a. The name and identification of the affected unit(s);
- b. The date and time of the sampling or measurements;
- c. The date any analyses were performed;
- d. The name of the company that performed the tests and/or analyses;
- e. The test and analytical methodologies used;
- f. The results of the tests including raw data, and/or analyses including sample calculations;
- g. The operating conditions at the time of the sampling or measurements; and
- h. The name of any relevant observers present including the testing company's representatives, any Illinois EPA or USEPA representatives, and the representatives of the source.

8.6.4 Reporting Addresses

- a. The following addresses should be utilized for the submittal of reports, notifications, and renewals:
 - i. Illinois EPA Air Compliance Section

Illinois Environmental Protection Agency Division of Air Pollution Control Compliance Section (#40) P.O. Box 19276 Springfield, Illinois 62794-9276

ii. Illinois EPA - Air Regional Field Office

Illinois Environmental Protection Agency Division of Air Pollution Control 5415 North University Peoria, Illinois 61614 iii. Illinois EPA - Air Permit Section (MC 11)

Illinois Environmental Protection Agency Division of Air Pollution Control Permit Section P.O. Box 19506 Springfield, Illinois 62794-9506

iv. USEPA Region 5 - Air Branch

USEPA (AE - 17J) Air & Radiation Division 77 West Jackson Boulevard Chicago, Illinois 60604

- b. Unless otherwise specified in the particular provision of this permit, reports shall be sent to the Illinois EPA - Air Compliance Section with a copy sent to the Illinois EPA - Air Regional Field Office.
- 8.7 Obligation to Comply with Title I Requirements

Any term, condition, or requirement identified in this permit by T1, T1R, or T1N is established or revised pursuant to 35 IAC Part 203 or 40 CFR 52.21 ("Title I provisions") and incorporated into this permit pursuant to both Section 39.5 and Title I provisions. Notwithstanding the expiration date on the first page of this permit, the Title I conditions remain in effect pursuant to Title I provisions until the Illinois EPA deletes or revises them in accordance with Title I procedures.

9.0 STANDARD PERMIT CONDITIONS

9.1 Effect of Permit

- 9.1.1 The issuance of this permit does not release the Permittee from compliance with State and Federal regulations which are part of the Illinois State Implementation Plan, as well as with other applicable statutes and regulations of the United States or the State of Illinois or applicable ordinances, except as specifically stated in this permit and as allowed by law and rule [Section 39.5(7)(j)(iv) of the Act].
- 9.1.2 In particular, this permit does not alter or affect the following:
 - a. The provisions of Section 303 (emergency powers) of the CAA, including USEPA's authority under that Section;
 - b. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;
 - c. The applicable requirements of the acid rain program consistent with Section 408(a) of the CAA; and
 - d. The ability of USEPA to obtain information from a source pursuant to Section 114 (inspections, monitoring, and entry) of the CAA.
- 9.1.3 Notwithstanding the conditions of this permit specifying compliance practices for applicable requirements, any person (including the Permittee) may also use other credible evidence to establish compliance or noncompliance with applicable requirements.

9.2 General Obligations of Permittee

9.2.1 Duty to Comply

The Permittee must comply with all terms and conditions of this permit. Any permit noncompliance constitutes a violation of the CAA and the Act, and is grounds for any or all of the following: enforcement action, permit termination, revocation and reissuance, modification, or denial of a permit renewal application [Section 39.5(7)(o)(i) of the Act].

The Permittee shall meet applicable requirements that become effective during the permit term in a timely manner unless an alternate schedule for compliance with the applicable requirement is established.

9.2.2 Duty to Maintain Equipment

The Permittee shall maintain all equipment covered under this permit in such a manner that the performance or operation of such equipment shall not cause a violation of applicable requirements.

9.2.3 Duty to Cease Operation

No person shall cause, threaten or allow the continued operation of any emission unit during malfunction or breakdown of the emission unit or related air pollution control equipment if such operation would cause a violation of an applicable emission standard, regulatory requirement, ambient air quality standard or permit limitation unless such malfunction or breakdown is allowed by a permit condition [Section 39.5(6)(c) of the Act].

9.2.4 Disposal Operations

The source shall be operated in such a manner that the disposal of air contaminants collected by the equipment operations, or activities shall not cause a violation of the Act or regulations promulgated thereunder.

9.2.5 Duty to Pay Fees

The Permittee must pay fees to the Illinois EPA consistent with the fee schedule approved pursuant to Section 39.5(18) of the Act, and submit any information relevant thereto [Section 39.5(7)(o)(vi) of the Act]. The check should be payable to "Treasurer, State of Illinois" and sent to: Fiscal Services Section, Illinois Environmental Protection Agency, P.O. Box 19276, Springfield, Illinois 62794-9276.

9.3 Obligation to Allow Illinois EPA Surveillance

Upon presentation of proper credentials and other documents, the Permittee shall allow the Illinois EPA, or an authorized representative to perform the following [Section 39.5(7)(a) and (p)(ii) of the Act and 415 ILCS 5/4]:

- a. Enter upon the Permittee's premises where an actual or potential emission unit is located; where any regulated equipment, operation, or activity is located or where records must be kept under the conditions of this permit;
- b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- c. Inspect during hours of operation any sources, equipment (including monitoring and air pollution control

equipment), practices, or operations regulated or required under this permit;

- d. Sample or monitor any substances or parameters at any location:
 - At reasonable times, for the purposes of assuring permit compliance; or
 - ii. As otherwise authorized by the CAA, or the Act.
- Obtain and remove samples of any discharge or emission of pollutants authorized by this permit; and
- f. Enter and utilize any photographic, recording, testing, monitoring, or other equipment for the purposes of preserving, testing, monitoring, or recording any activity, discharge or emission at the source authorized by this permit.
- 9.4 Obligation to Comply With Other Requirements

The issuance of this permit does not release the Permittee from applicable State and Federal laws and regulations, and applicable local ordinances addressing subjects other than air pollution control.

9.5 Liability

9.5.1 Title

This permit shall not be considered as in any manner affecting the title of the premises upon which the permitted source is located.

9.5.2 Liability of Permittee

This permit does not release the Permittee from any liability for damage to person or property caused by or resulting from the construction, maintenance, or operation of the sources.

9.5.3 Structural Stability

This permit does not take into consideration or attest to the structural stability of any unit or part of the source.

9.5.4 Illinois EPA Liability

This permit in no manner implies or suggests that the Illinois EPA (or its officers, agents or employees) assumes any liability, directly or indirectly, for any

loss due to damage, installation, maintenance, or operation of the source.

9.5.5 Property Rights

This permit does not convey any property rights of any sort, or any exclusive privilege [Section 39.5(7)(o)(iv) of the Act].

9.6 Recordkeeping

9.6.1 Control Equipment Maintenance Records

A maintenance record shall be kept on the premises for each item of air pollution control equipment. As a minimum, this record shall show the dates of performance and nature of preventative maintenance activities.

9.6.2 Records of Changes in Operation

A record shall be kept describing changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under this permit, and the emissions resulting from those changes [Section 39.5(12)(b)(iv) of the Act].

9.6.3 Retention of Records

- a. Records of all monitoring data and support information shall be retained for a period of at least 5 years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records, original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit [Section 39.5(7)(e)(ii) of the Act].
- b. Other records required by this permit shall be retained for a period of at least 5 years from the date of entry unless a longer period is specified by a particular permit provision.

9.7 Annual Emissions Report

The Permittee shall submit an annual emissions report to the Illinois EPA, Compliance Section no later than May 1 of the following year, as required by 35 IAC Part 254.

9.8 Requirements for Compliance Certification

Pursuant to Section 39.5(7)(p)(v) of the Act, the Permittee shall submit annual compliance certifications. The compliance

certifications shall be submitted no later than May 1 or more frequently as specified in the applicable requirements or by permit condition. The compliance certifications shall be submitted to the Air Compliance Section, Air Regional Field Office, and USEPA Region 5 - Air Branch. The addresses for the submittal of the compliance certifications are provided in Condition 8.6.4 of this permit.

- a. The certification shall include the identification of each term or condition of this permit that is the basis of the certification; the compliance status; whether compliance was continuous or intermittent; the method(s) used for determining the compliance status of the source, both currently and over the reporting period consistent with the conditions of this permit.
- b. All compliance certifications shall be submitted to USEPA Region 5 in Chicago as well as to the Illinois EPA.
- c. All compliance reports required to be submitted shall include a certification in accordance with Condition 9.9.

9.9 Certification

Any document (including reports) required to be submitted by this permit shall contain a certification by a responsible official of the Permittee that meets the requirements of Section 39.5(5) of the Act [Section 39.5(7)(p)(i) of the Act]. An example Certification by a Responsible Official is included as an attachment to this permit.

9.10 Defense to Enforcement Actions

9.10.1 Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit [Section 39.5(7)(o)(ii) of the Act].

9.10.2 Emergency Provision

- a. An emergency shall be an affirmative defense to an action brought for noncompliance with the technologybased emission limitations under this permit if the following conditions are met through properly signed, contemporaneous operating logs, or other relevant evidence:
 - i. An emergency occurred as provided in Section 39.5(7)(k) of the Act and the Permittee can identify the cause(s) of the emergency.

Normally, an act of God such as lightning or flood is considered an emergency;

- ii. The permitted source was at the time being properly operated;
- iii. The Permittee submitted notice of the emergency to the Illinois EPA within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a detailed description of the emergency, any steps taken to mitigate emissions, and corrective actions taken; and
- iv. During the period of the emergency the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission limitations, standards, or regulations in this permit.
- b. This provision is in addition to any emergency or upset provision contained in any applicable requirement. This provision does not relieve a Permittee of any reporting obligations under existing federal or state laws or regulations.

9.11 Permanent Shutdown

This permit only covers emission units and control equipment while physically present at the indicated source location(s). Unless this permit specifically provides for equipment relocation, this permit is void for the operation or activity of any item of equipment on the date it is removed from the permitted location(s) or permanently shut down. This permit expires if all equipment is removed from the permitted location(s), notwithstanding the expiration date specified on this permit.

9.12 Reopening and Reissuing Permit for Cause

9.12.1 Permit Actions

This permit may be modified, reopened, and reissued, for cause pursuant to Section 39.5(15) of the Act. The filing of a request by the Permittee for a permit modification, revocation, and reissuance, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition [Section 39.5(7)(o)(iii) of the Act].

9.12.2 Reopening and Revision

This permit must be reopened and revised if any of the following occur [Section 39.5(15)(a) of the Act]:

- a. Additional requirements become applicable to the equipment covered by this permit and three or more years remain before expiration of this permit;
- b. Additional requirements become applicable to an affected source for acid deposition under the acid rain program;
- c. The Illinois EPA or USEPA determines that this permit contains a material mistake or inaccurate statement when establishing the emission standards or limitations, or other terms or conditions of this permit; and
- d. The Illinois EPA or USEPA determines that this permit must be revised to ensure compliance with the applicable requirements of the Act.

9.12.3 Inaccurate Application

The Illinois EPA has issued this permit based upon the information submitted by the Permittee in the permit application. Any misinformation, false statement or misrepresentation in the application shall be grounds for revocation under Section 39.5(15)(b) of the Act.

9.12.4 Duty to Provide Information

The Permittee shall furnish to the Illinois EPA, within a reasonable time specified by the Illinois EPA any information that the Illinois EPA may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. Upon request, the Permittee shall also furnish to the Illinois EPA copies of records required to be kept by this permit, or for information claimed to be confidential, the Permittee may furnish such records directly to USEPA along with a claim of confidentiality [Section 39.5(7)(o)(v) of the Act].

9.13 Severability Clause

The provisions of this permit are severable, and should any one or more be determined to be illegal or unenforceable, the validity of the other provisions shall not be affected. The rights and obligations of the Permittee shall be construed and enforced as if this permit did not contain the particular provisions held to be invalid and the applicable requirements

underlying these provisions shall remain in force [Section 39.5(7) (i) of the Act].

9.14 Permit Expiration and Renewal

The right to operate terminates on the expiration date unless the Permittee has submitted a timely and complete renewal application. For a renewal to be timely it must be submitted no later than 9 and no sooner than 12 months prior to expiration. The equipment may continue to operate during the renewal period until final action is taken by the Illinois EPA, in accordance with the original permit conditions [Section 39.5(5)(1), (n), and (o) of the Act].

10.0 ATTACHMENTS

10.1 Attachment 1 - Summary of Emission Units

The following emission units are owned and operated by Dixon/Lee Energy Partners, LLC (BOA I.D. No 103020ACJ):

Emission		Commenced Operation
Unit	Description	
Engine/Generator 1	Jenbacher	July 1, 1999
	Landfill Gas Fired	
	Gensets	
	$(Model JGC 320 GS-L.L.)^{1}$	
Engine/Generator 2	Jenbacher	July 1, 1999
	Landfill Gas Fired	
	Gensets	
	$(Model JGC 320 GS-L.L.)^{1}$	
Engine/Generator 3	Jenbacher	July 1, 1999
	Landfill Gas Fired	
	Gensets	
	$(Model JGC 320 GS-L.L.)^1$	
Engine/Generator 4	Jenbacher	December 10, 2001
	Landfill Gas Fired	
	Gensets	
	$(Model JGC 320 GS-L.L.)^{1}$	
	Candlestick Flare ¹	None

Landfill gas utilized in the above emission units is generated by Phases II and V Dixon/GROP #2 landfill (Owned by the City of Dixon BOA I.D. No. 103020ACD) and the Lee County Landfill (See CAAPP Permit No. 99090089 - BOA I.D. No. 103806AAL).

The following emission units are owned and operated by the Lee County Landfill (CAAPP Permit Application No.: 99090089 - BOA I.D. No. 103806AAL).

Emission Unit	Description	Significant Dates	Emission Control Equipment
01	MSW Landfill	Commenced Construction June 1998 Operation Commenced November 1998	Gas to Energy Facilty ¹
02	Leachate Storage Tank		None

Adjacent gas to energy plant owned and operated by Dixon/Lee Energy Partners, LLC (CAAPP Permit Application No.: 00070051 - BOA I.D. No. 103020ACJ).

10.2	Attachment	2	- Example	Certification	by	а	Responsible	Official
------	------------	---	-----------	---------------	----	---	-------------	----------

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature:	
Name:	
Official Title:	
Telephone No.:	
Date Signed:	

10.3 Attachment 3 - Guidance on Revising This Permit

The Permittee must submit an application to the Illinois EPA using the appropriate revision classification in accordance with Sections 39.5(13) and (14) of the Act and 35 IAC 270.302. Specifically, there are currently three classifications for revisions to a CAAPP permit. These are:

- 1. Administrative Permit Amendment;
- 2. <u>Minor Permit Modification</u>; and
- 3. Significant Permit Modification.

The Permittee must determine, request, and submit the necessary information to allow the Illinois EPA to use the appropriate procedure to revise the CAAPP permit. A brief explanation of each of these classifications follows.

1. Administrative Permit Amendment

- Corrects typographical errors;
- Identifies a change in the name, address, or phone number of any person identified in the permit, or provides a similar minor administrative change at the source;
- Requires more frequent monitoring or reporting by the Permittee;
- Allows for a change in ownership or operational control of the source where no other change in the permit is necessary, provided that a written agreement containing a specific date for transfer of permit responsibility, coverage, and liability between the current and new Permittees has been submitted to the Illinois EPA;
- Incorporates into the CAAPP permit a construction permit, provided the conditions of the construction permit meet the requirements for the issuance of CAAPP permits; or
- Incorporates into the CAAPP permit revised limitations or other requirements resulting from the application of an approved economic incentives rule, marketable permits rule, or generic emissions trading rule.

2. Minor Permit Modification

• Do not violate any applicable requirement;

- Do not involve significant changes to existing monitoring, reporting, or recordkeeping requirements in the permit;
- Do not require a case-by-case determination of an emission limitation or other standard, or a source-specific determination of ambient impacts, or a visibility or increment analysis;
- Do not seek to establish or change a permit term or condition for which there is no corresponding underlying requirement and which avoids an applicable requirement to which the source would otherwise be subject. Such terms and conditions include:
 - A federally enforceable emissions cap assumed to avoid classification as a modification under any provision of Title I of the CAA; and
 - An alternative emissions limit approved pursuant to regulations promulgated under Section 112(i)(5) of the CAA.
- Are not modifications under any provision of Title I of the CAA; and
- Are not required to be processed as a significant permit modification.

An application for a minor permit modification shall include the following:

- A description of the change, the emissions resulting from the change, and any new applicable requirements that will apply if the change occurs;
- The source's suggested draft permit/conditions;
- Certification by a responsible official that the proposed modification meets the criteria for use of minor permit modification procedures and a request that such procedures be used; and
- Information as contained on form 271-CAAPP for the Illinois EPA to use to notify USEPA and affected States.

3. Significant Permit Modification

 Applications that do not qualify as either minor permit modifications or as administrative permit amendments;

- Applications requesting a significant change in existing monitoring permit terms or conditions;
- Applications requesting a relaxation of reporting or recordkeeping requirements; and
- Cases in which, in the judgment of the Illinois EPA, action on an application for modification would require decisions to be made on technically complex issues.

An application for a significant permit modification shall include the following:

• A detailed description of the proposed change(s), including all physical changes to equipment, changes in the method of operation, changes in emissions of each pollutant, and any new applicable requirements which will apply as a result of the proposed change. Note that the Permittee need only submit revised forms for equipment and operations that will be modified.

The Illinois EPA requires the information on the following appropriate forms to be submitted in accordance with the proper classification:

- Form 273-CAAPP, REQUEST FOR ADMINISTRATIVE PERMIT AMENDMENT FOR CAAPP PERMIT; or
- Form 271-CAAPP, MINOR PERMIT MODIFICATION FOR CAAPP PERMIT; or
- Form 200-CAAPP, APPLICATION FOR CAAPP PERMIT (for significant modification).

Application forms can be obtained from the Illinois EPA website at http://www.epa.state.il.us/air/forms.

Note that the request to revise the permit must be certified for truth, accuracy, and completeness by a responsible official.

Note that failure to submit the required information may require the Illinois EPA to deny the application. The Illinois EPA reserves the right to require that additional information be submitted as needed to evaluate or take final action on applications pursuant to Section 39.5(5)(g) of the Act and 35 IAC 270.305.



Illinois Environmental Protection Agency
Division Of Air Pollution Control -- Permit Section
P.O. Box 19506
Springfield, Illinois 62794-9506

Application For Construction Permit (For CAAPP Sources Only)		For Illinois EPA use only			
		I.D. number:			
		Permit number:			
			Date received:		
	orm is to be used by CAAPP sources sary information and completed CAA			a construction permit. Please attach other ification project.	
		Source Ir	nformation		
1.	Source name:				
2.	Source street address:				
3.	City:			4. Zip code:	
5.	Is the source located within	city limits?		☐ Yes ☐ No	
6.	Township name:	7. County:		8. I.D. number:	
		Owner In	formation		
9.	Name:				
10.	Address:				
11.	City:	12. State:		13. Zip code:	
				<u> </u>	
	Operator	Information ((if different fr	om owner)	
14.	Name				
15.	Address:				
16.	City:	17. State:		18. Zip code:	
J.	l.				
			Information		
19.	Who is the applicant? ☐ Owner ☐ Operator		Owner 🗌	e to: (check one) Operator	
21.	21. Attention name and/or title for written correspondence:				
22.	Technical contact person fo	r application:	23. Conf	tact person's telephone number:	

This Illinois EPA is authorized to require and you must disclose this information under 415 ILCS 5/39. Failure to do so could result in the application being denied and penalties under 415 ILCS 5 et seq. It is not necessary to use this form in providing this information. This form has been approved by the forms management center.

	Summary Of Application Contents						
24.	Does the application address whether the proposed project would constitute a new major source or major modification under each of the following programs:	☐ Yes	☐ No				
	 a) Non-attainment New Source Review – 35 IAC Part 203; b) Prevention of Significant Deterioration (PSD) – 40 CFR 52.21; c) Hazardous Air Pollutants: Regulations Governing Constructed or Reconstructed Major Sources – 40 CFR Part 63? 						
25.	Does the application identify and address all applicable emissions standards, including those found in the following: a) Board Emission Standards – 35 IAC Chapter I, Subtitle B; b) Federal New Source Performance Standards – 40 CFR Part 60;	☐ Yes	□ No				
	c) Federal Standards for Hazardous Air Pollutants – 40 CFR Parts 61 and 63?						
26.	Does the application include a process flow diagram(s) showing all emission units and control equipment, and their relationship, for which a permit is being sought?	☐ Yes	□ No				
27.	Does the application include a complete process description for the emission units and control equipment for which a permit is being sought?	☐ Yes	☐ No				
28.	Does the application include the information as contained in completed CAAPP forms for all appropriate emission units and air pollution control equipment, listing all applicable requirements and proposed exemptions from otherwise applicable requirements, and identifying and describing any outstanding legal actions by either the USEPA or the Illinois EPA? Note: The use of "APC" application forms is not appropriate for applications for CAAPP sources. CAAPP forms should be used to supply information.	☐ Yes	□ No				
29.	If the application contains TRADE SECRET information, has such information been properly marked and claimed, and have two separate copies of the application suitable for public inspection and notice been submitted, in accordance with applicable rules and regulations?	☐ Yes	□ No				
No TRADI SECRET informatio this applic			RADE RET nation in				
Note 1: /	Answering "No" to any of the above may result in the application being deemed incomplete.						
	Signature Block						
	This certification must be signed by a responsible official. Applications will certification will be returned as incomplete.						
30.	I certify under penalty of law that, based on information and belief formed inquiry, the statements and information contained in this application are tricomplete. Authorized Signature:						
BY:							
	AUTHORIZED SIGNATURE TITLE OF SIGNATURE	GNATORY					

Note 2: An operating permit for the construction/modification permitted in a construction permit must be obtained by applying for the appropriate revision to the source's CAAPP permit, if necessary.

TYPED OR PRINTED NAME OF SIGNATORY

DATE

10.5 Attachment 5 - Guidance on Renewing This Permit

Timeliness - Pursuant to Section 39.5(5)(n) of the Act and 35 IAC 270.301(d), a source must submit to the Illinois EPA a complete CAAPP application for the renewal of a CAAPP permit not later than 9 months before the date of permit expiration of the existing CAAPP permit in order for the submittal to be deemed timely. Note that the Illinois EPA typically sends out renewal notices approximately 18 months prior to the expiration of the CAAPP permit.

The CAAPP application must provide all of the following information in order for the renewal CAAPP application to be deemed complete by the Illinois EPA:

- A completed renewal application form 200-CAAPP, APPLICATION FOR CAAPP PERMIT.
- 2. A completed compliance plan form 293-CAAPP, COMPLIANCE PLAN/SCHEDULE OF COMPLIANCE FOR CAAPP PERMIT.
- 3. A completed compliance certification form 296-CAAPP, COMPLIANCE CERTIFICATION, signed by the responsible official.
- 4. Any applicable requirements that became effective during the term of the permit and that were not included in the permit as a reopening or permit revision.
- 5. If this is the first time this permit is being renewed and this source has not yet addressed CAM, the application should contain the information on form 464-CAAPP, COMPLIANCE ASSURANCE MONITORING (CAM) PLAN.
- 6. Information addressing any outstanding transfer agreement pursuant to the ERMS.
- 7. If operations of an emission unit or group of emission units remain unchanged and are accurately depicted in previous submittals, the application may contain a letter signed by a responsible official that requests incorporation by reference of existing information previously submitted and on file with the Illinois EPA. This letter must also include a statement that information incorporated by reference is also being certified for truth and accuracy by the responsible official's signing of the form 200-CAAPP, APPLICATION FOR CAAPP PERMIT and the form 296-CAAPP, COMPLIANCE CERTIFICATION. The boxes should be marked yes on form 200-CAAPP, APPLICATION FOR CAAPP PERMIT, as existing information is being incorporated by reference.

- b. If portions of current operations are not as described in previous submittals, then in addition to the information above for operations that remain unchanged, the application must contain the necessary information on all changes, e.g., discussion of changes, new or revised CAAPP forms, and a revised fee form 292-CAAPP, FEE DETERMINATION FOR CAAPP PERMIT, if necessary.
- 8. Information about all off-permit changes that were not prohibited or addressed by the permit to occur without a permit revision and the information must be sufficient to identify all applicable requirements, including monitoring, recordkeeping, and reporting requirements, for such changes.
- 9. Information about all changes made under 40 CFR 70.4(b)(12)(i) and (ii) that require a 7-day notification prior to the change without requiring a permit revision.

The Illinois EPA will review all applications for completeness and timeliness. If the renewal application is deemed both timely and complete, the source shall continue to operate in accordance with the terms and conditions of its CAAPP permit until final action is taken on the renewal application.

Notwithstanding the completeness determination, the Illinois EPA may request additional information necessary to evaluate or take final action on the CAAPP renewal application. If such additional information affects your allowable emission limits, a revised form 292-CAAPP, FEE DETERMINATION FOR CAAPP PERMIT must be submitted with the requested information. The failure to submit to the Illinois EPA the requested information within the time frame specified by the Illinois EPA, may force the Illinois EPA to deny your CAAPP renewal application pursuant to Section 39.5 of the Act.

Application forms may be obtained from the Illinois EPA website at http://www.epa.state.il.us/air/forms.html.

If you have any questions regarding this matter, please contact a permit analyst at 217/782-2113.

Mail renewal applications to:

Illinois Environmental Protection Agency Division of Air Pollution Control Permit Section (MC 11) P.O. Box 19506 Springfield, Illinois 62794-9506

MED:psj

10.6 Attachment 6 Scanned Copy of the Letter to Gregory J. Graetz Derenzo and Associates, Inc. from George Czerniak USEPA, dated December 9, 2003



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 5 77 WEST JACKSON BOULEVARD CHICAGO, IL 60604-3590

DEC 0 9 2003

REPLY TO THE ATTENTION OF

(AE-17J)

Gregory J. Graetz Project Engineer Derenzo and Associates, Inc. 39395 Schoolcraft Road Livonia, Michigan 48150

Re. Clarification of Landfill Gas Treatment NSPS Exemption for Dixon/Lee Energy Partners, L.L.C. in Dixon, Illinois Facility I.D. No. 103020ACJ

Dear Mr. Graetz:

Thank you for your October 20, 2003, letter to the U.S. EPA asking for clarification regarding the gas treatment exemption for Dixon/Lee Energy Partners landfill to energy facility (Dixon) located hear Dixon, Illinois. Dixon utilizes landfill gas as fuel to power internal combustion engines (IC) and electricity generators. Dixon acts as the control device for the landfill gas emissions from two neighboring landfills and is subject to the New Source Performance Standards (NSPS) for Municipal Solid Waste Landfills (40 CFR Part 60, Subpart WWW). The landfill gas is the only fuel used at the facility.

Your letter indicates that prior to use as fuel in the IC engines and generators, the landfill gas is first 1) compressed with blowers, 2) chilled with an air-to-air cooler, 3) de-watered with a knock-out pot (tank) and a demister pad, and 4) filtered with a sequence of media that consists of a primary dry 10-micron filter and a secondary dry 1-micron filter. You also indicate that Dixon operates an air-assisted, open candlestick flare that is used to control landfill gas during periods of engine maintenance and repair, and when control is required for excess landfill gas generation.

The regulations at 40 C.F.R. Part 60.752(b)(2)(iii) state that collected landfill gas is required to be routed to a control system that complies with the requirements in either: A) an open flare; B) a control system or enclosed combuster designed to reduce NMOC; or C) a treatment system that processes the collected gas for subsequent sale or use. The landfill gas applicable to Dixon has been treated for sale or use under 60.752(b)(2)(iii)(C). U.S. EPA has made several determinations

Recycled/Recyclable . Printed with Vegetable Oil Based Inks on 100% Recycled Paper (50% Postconsumer)

and has stated in the Federal Register Proposed Rule Amendments dated May 23, 2002, that compression, de-watering, and filtering the landfill gas down to at least 10 microns is considered treatment for the purposes of 60.752(b)(2)(iii)(C).

Your letter also asks for clarification that once the landfill gas is treated pursuant to 60.752(b)(2)(iii)(C), that the gas is no longer subject to the monitoring and recordkeeping requirements found at 60.756(b) and 60.758(b) and (c), respectively. The Federal Register Proposed Rule Amendments clarify that once the landfill gas is treated, the facilities that buy or use the gas have no further obligations related to the NSPS. Therefore, Dixon would not be subject to the monitoring and recordkeeping requirements located at 70.756(b) and 60.758(b) and (c).

However, emissions from any atmospheric vent from the gas treatment system, including any compressor, are subject to the requirements of 40 C.F.R 60.752(b)(2) (iii) (A) and (B). This does not include exhaust from an energy recovery device.

This determination was based on a previous determinations from Region 3 dated February 12, 2002, and October 3, 2002, and was presented to OAQPS and OECA for comment. The Federal Register Proposed Rule Amendments from 2002 are meant to be a clarification of the existing NSPS, not changes in the rule. If you have any questions, feel free to contact Lynne Roberts, of my staff, at (312) 886-0250.

Sincerely yours,

George T. Czerniak, Chief

Air Enforcement and compliance Assurance Branch

cc: Julie Armitage, Acting Manager

Bureau of Air - Compliance and Enforcement Section Illinois Environmental Protection Agency

Mary Ann Warner, OAQPS Research Triangle Park

Zofia Kosim, OECA USEPA Headquarters